

APR 24, 2015

#182

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AVENGERS
AGE OF ULTRON
PREMIERES
THE LATEST ADDITION TO THE
MARVEL CINEMATIC UNIVERSE

GOOGLE
MOBILE
RANKINGS
SHAKING UP SEARCH
ON SMARTPHONES



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YAHOO CHOOSES TO STAY WITH MICROSOFT IN UPDATED SEARCH DEAL



Yahoo and Microsoft will keep working together on Internet search, but Yahoo is getting more control over the how the search results are presented.

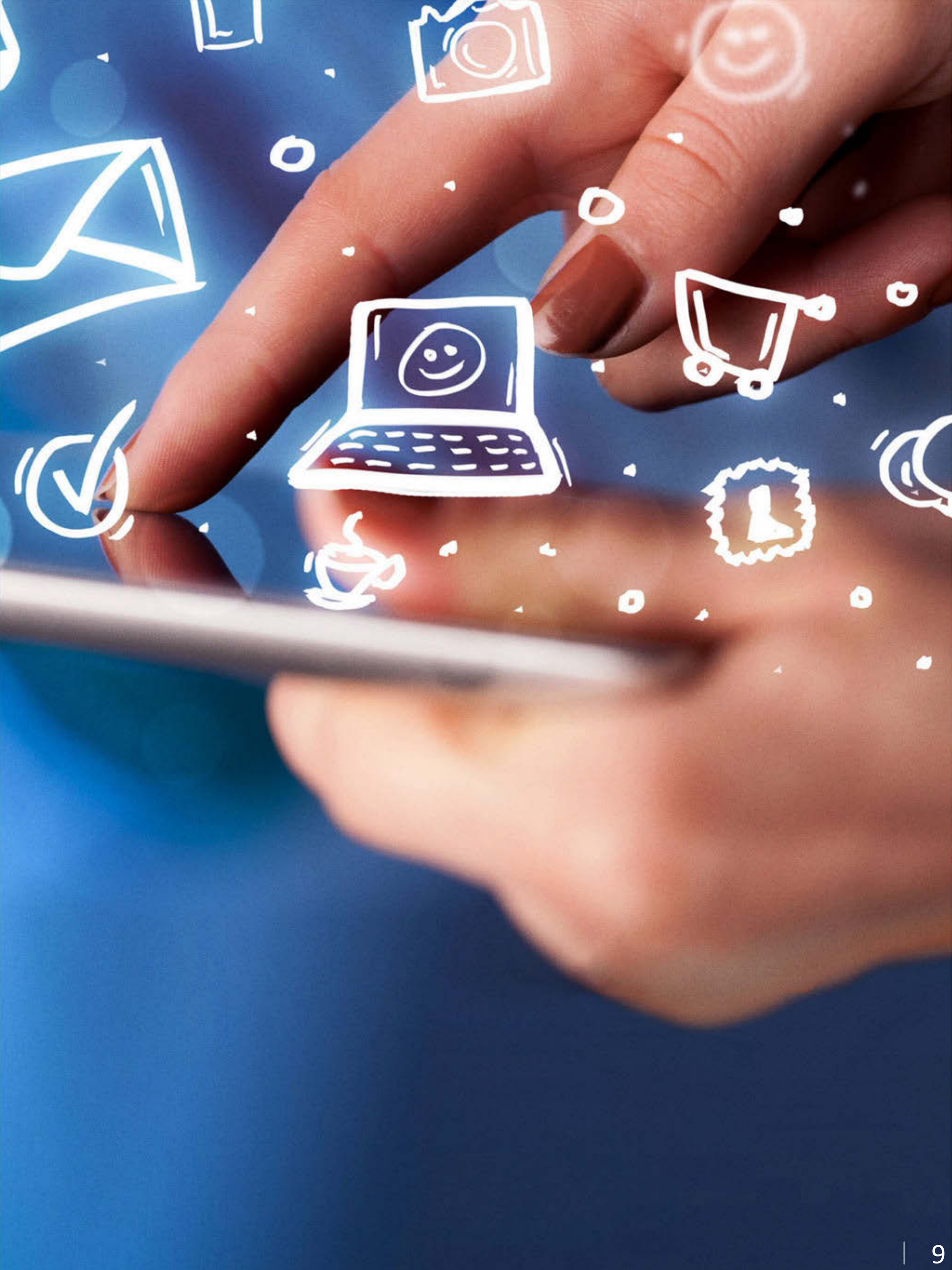
An agreement announced Thursday extends a search partnership that Yahoo Inc. and Microsoft Corp. forged in 2009 while they were being led by different CEOs. Current Yahoo CEO Marissa Mayer had the option of terminating the relationship under a clause triggered earlier this year.



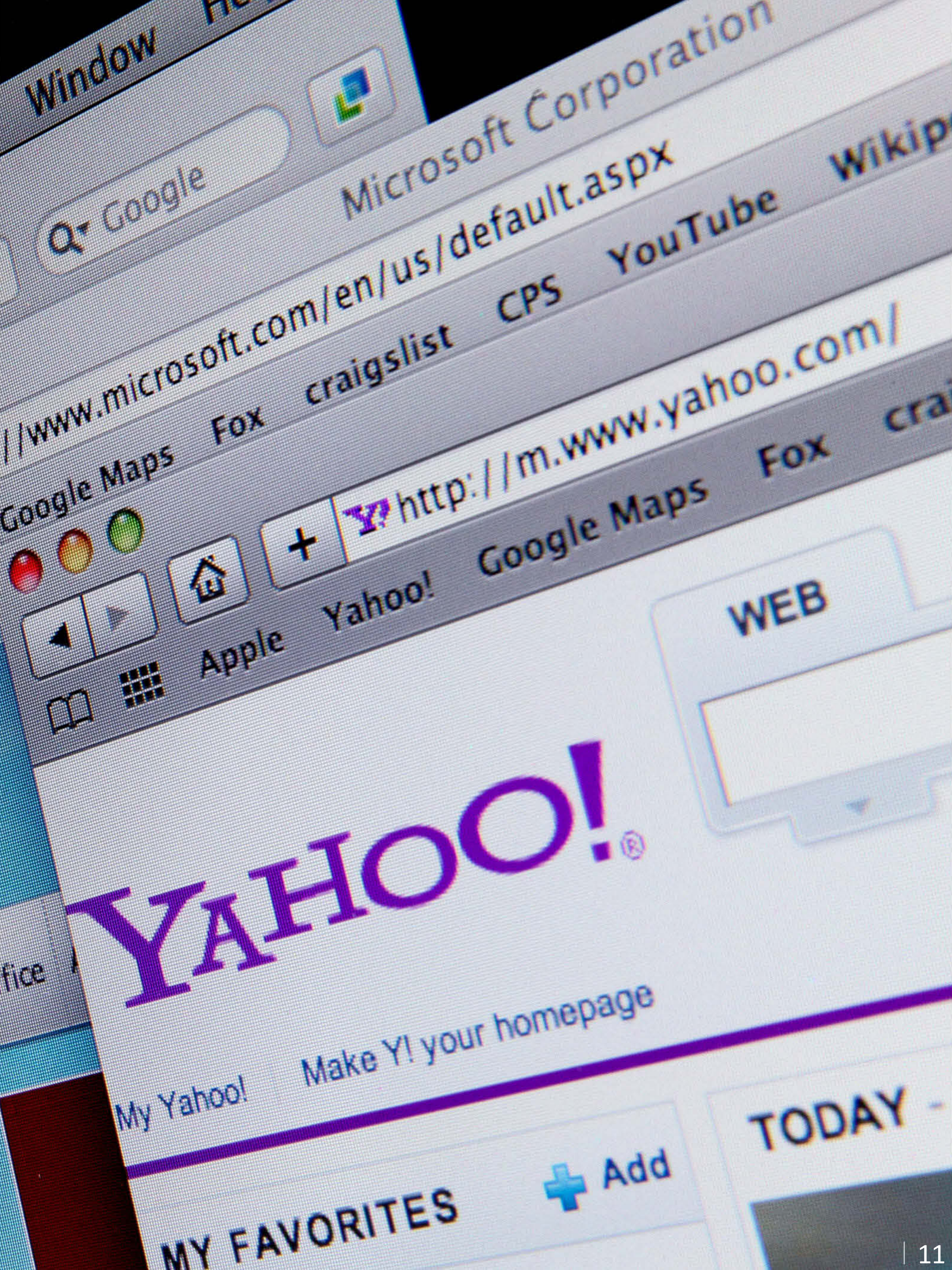


The two are trying to chip away at Google's dominance of Internet searches. They haven't had much success so far. Google still controls two-thirds of the U.S. search market and holds an even larger share in Europe. Mayer spent 12 years helping Google build its lucrative lead in before becoming Yahoo's CEO in 2011.

As has been the case since the companies formed their alliance, Microsoft's technology will power most of the search results on Yahoo's sites. In return, Yahoo will receive most of the revenue from the ads posted alongside the search results on its sites.







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TODAY -





The original deal called for Microsoft to pay 88 percent of the search revenue to Yahoo. The ad commission rose to 90 percent in late February, according to regulatory filings. The companies said their economic arrangement won't change under the revised agreement.

The revised contract gives Yahoo more control over the how its search page looks and works. There will be a few differences in how the companies sell ads under the new agreement.

Investors evidently don't think much is going to change. Yahoo's stock gained 5 cents to close Thursday at \$45.78 while Microsoft shares shed 10 cents to close at \$42.16.



AVENGERS: AGE OF ULTRON PREMIERES

Marvel fans get excited about Ultron



THE LATEST ADDITION TO THE MARVEL CINEMATIC UNIVERSE

That aren't many people who don't love a good superhero film, and if there's one such film that can't be ignored by anyone seeking a heady dose of world-saving capers this spring, it's *Avengers: Age of Ultron*. The iconic team of superheroes that first appeared in 1963 is still going strong, and Earth's Mightiest Heroes have quite the assignment on their hands for this latest big screen epic, which will be released on North American shores on May 1.

The fact that, at the time of typing, the film has already premiered in Los Angeles on April 13, means that we already know a lot about it - and of course, we'll try not to include any big spoilers here. Nonetheless, fans of all things Marvel have much to look forward to on the evidence of the cast and crew alone, Joss Whedon writing and directing and the ensemble cast boasting such talents as Robert Downey Jr., Chris Hemsworth, Mark Ruffalo, Chris Evans and Scarlett Johansson.

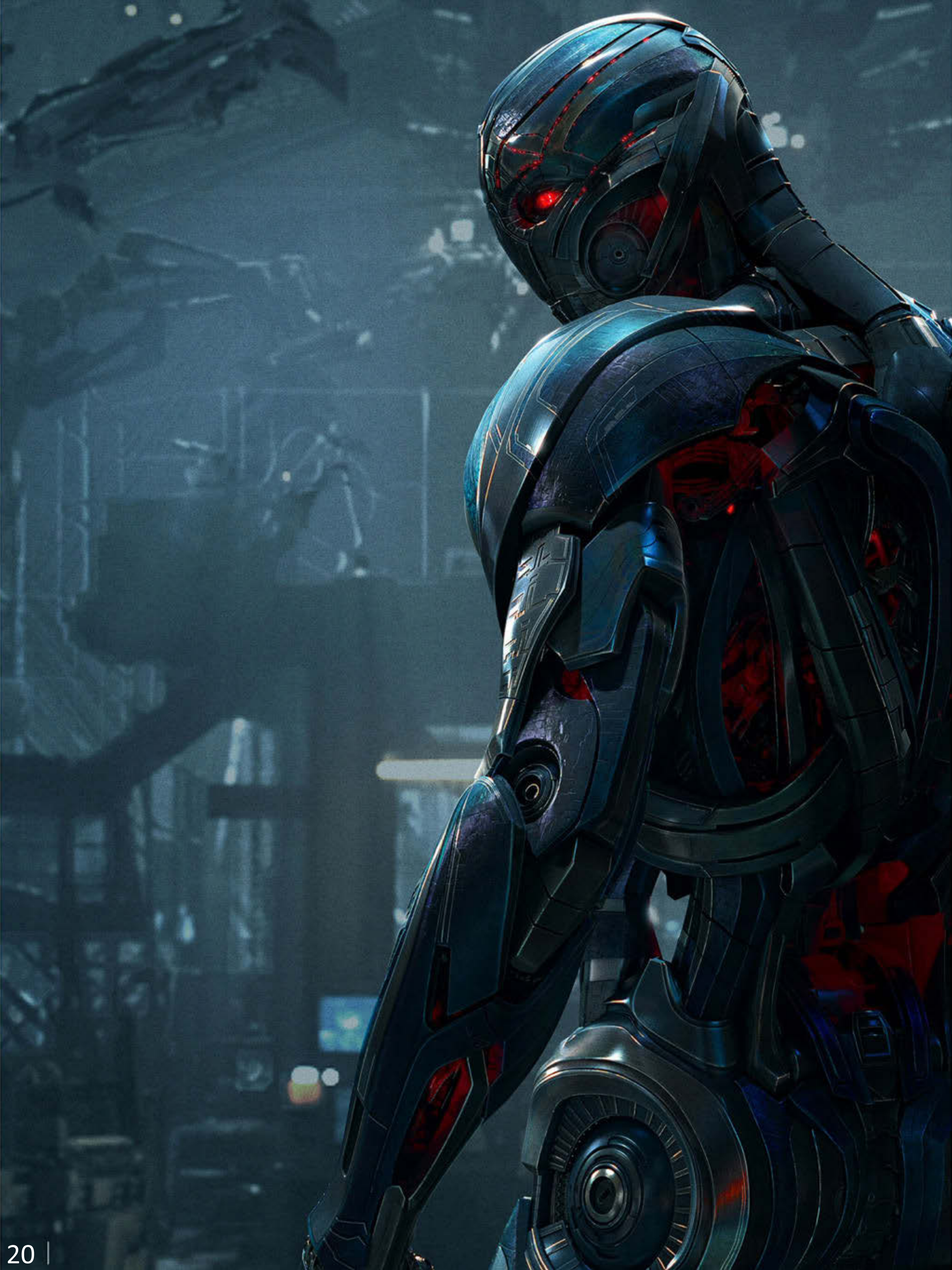
The follow-up to 2012's *Marvel's The Avengers*, *Avengers: Age of Ultron* centers on the superhero team's fight against Ultron, a technological enemy that is determined to render the human race extinct. It's Downey's character, Tony Stark, who creates Ultron in an attempt to jumpstart a dormant peacekeeping program, **only for the self-aware robot to decide that it is humanity itself that is principally to blame for the lack of harmony on Earth.**













MORE 'TORTURED' THAN 'EVIL'

So far, so traditional superhero movie.

Ultron's rapidly-devised plan to eradicate the global human population forces the Avengers to assemble once more to stop him. Iron Man (Downey), Captain America (Evans), Thor (Hemsworth), The Incredible Hulk (Ruffalo), Black Widow (Johansson) and Hawkeye (Jeremy Renner) all feature, with - in the words of Marvel itself - "uneasy alliances and unexpected action" helping to keep things spicy beyond the simple-enough premise.

A signal of the kind of depth that Whedon has aimed for with Age of Ultron is the fact that he has described the titular character as not so much "evil", but tortured. In an interview with Vulture, the director commented:

"Ultron's pain is very, very real to me. He can't control the way his pain makes him behave. And I can relate to that."

Indeed, Whedon has admitted that the whole film is "so badly, nakedly me", telling Entertainment Weekly that "To do something that is as personal as this movie is - on that budget, for a studio that needs a summer tentpole - is an extraordinary privilege."

There's no doubting that Ultron - portrayed by James Spader - is a formidable Artificial Intelligence program. Possessing an eight-foot tall advanced robotic body and the ability to learn inhumanly quickly, downloading data directly to his mind, he declares that "I was designed to save the world", but soon attributes the most undesirable qualities to the human race.









Of the latter, he concludes: "**How could you be worthy? You're all killers. You want to protect the world, but you don't want it to change.** There's only one path to peace: your extinction."


THE MARVEL CINEMATIC UNIVERSE'S LATEST INSTALLMENT

Of course, Age of Ultron isn't just a standalone film - it's part of an infinitely wider fictional world known as the Marvel Universe, which brings together all manner of familiar (and less familiar) Marvel characters - the best-known being Spider-Man, the X-Men, the Fantastic Four and the Avengers.

The Avengers themselves were created by writer-editor Stan Lee and artist/co-plotter Jack Kirby. They initially consisted of Iron Man, Ant-Man, the Wasp, Thor and the Hulk, and it's fair to say that the revolving roster has only added to the interest and appeal. Humans, robots, mutants, aliens, supernatural beings and even one-time villains have all been members of the Avengers over the last few decades, responding to a battle cry of "Avengers assemble!" and combating the enemies that would be too overwhelming a challenge for one superhero.

The broader Marvel Universe of which the Avengers are a part has generated various comic books, role playing games, animated television series and other media. The Marvel Cinematic Universe (MCU) is the term used for the superhero films that are





based on the characters and independently produced by Marvel Studios.

The intersecting common plot elements, settings and casts have only added to the fascination around the MCU, which began with the release of Iron Man in 2008 and has continued with the likes of The Incredible Hulk (2008), Thor (2011) and Guardians of the Galaxy (2014) - an Ant-Man movie also set for release in July.





A BIGGER ROLE FOR SCARLETT JOHANSSON'S BLACK WIDOW

It seems that everywhere the viewer looks, there will be something to entice and stimulate them in Age of Ultron. That is certainly the case as far as the film's galaxy of characters is concerned, also encompassing such less prominent players as Vision and J.A.R.V.I.S. - played by Paul Bettany - and Maria Hill, the former high-ranking S.H.I.E.L.D. agent now in the employ of Stark. She is played by Cobie Smulders.

But what about Scarlett Johansson? Many of the critical reviews to have already emerged have focused on her expanded part as Natasha Romanoff and Black Widow. Johansson herself has explained that in the new movie, "we definitely learn more about Widow's backstory, and we get to find out how she became the person you see. **All of these characters have deep, dark pasts, and I think that the past catches up to some of us a little bit.**"

It's obvious that Black Widow doesn't simply have the role in this movie of romancing Hulk - she actually enjoys a lot of the screen time, which has triggered further speculation about a dedicated Black Widow movie in the future. Although Whedon has said that he won't direct another Avengers movie after Age of Ultron, he has said to MTV that if he could direct one solo-led Marvel movie, Widow would be his choice.

With Johansson also suggesting that she would be "up for" such a film if Whedon was





in the director's chair, we suspect that the possibility won't be too far away from the minds of Marvel executives.

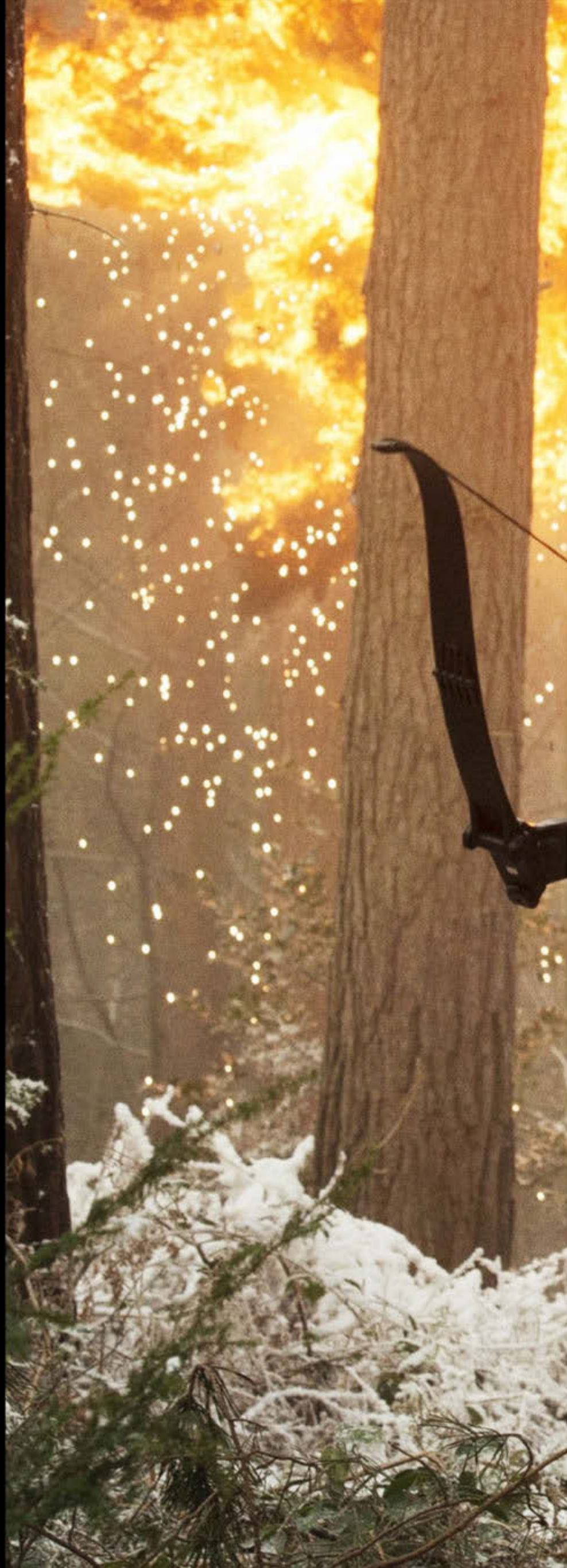
RESPONDING TO AUDIENCE EXPECTATIONS

When the Superman reboot *Man of Steel* was released in 2013, it sparked a fair few controversies, not least of which was the sheer destruction wrought upon Metropolis in the final battle between Superman and Zod. The adversaries were shown slamming each other into falling buildings as part of the city ended up being leveled. Many fans objected to this, on the basis that it would have surely meant a 9/11-esque toll of off-screen victims.

Avengers: Age of Ultron, though, clearly takes a different approach, with the heroes frequently portrayed evacuating and saving innocent people. This evidently isn't a superhero movie that is prepared to accept the average man or woman as collateral damage in a brawl with the enemy, which is actually an interesting way to add to the challenge faced by the protagonists in their pursuit of Ultron.

What cannot be doubted is that this was a deliberate decision, Whedon admitting that he had discussed with Kevin Feige - the head of Marvel Studios - "that we'd seen a little bit of a trend in movies where the city gets destroyed and the heroes say, 'We won!' And I'm thinking, Define 'win'."

The director said that with *Ultron*, he wished to "get back to what's important, which is that













the people you're trying to protect are people. **We knew that we wanted to play with a lot of big, fun destruction,** but at the same time, we wanted to say, 'There's a price for this.'"

ONE SERIOUSLY MUST-SEE SUPERHERO MOVIE

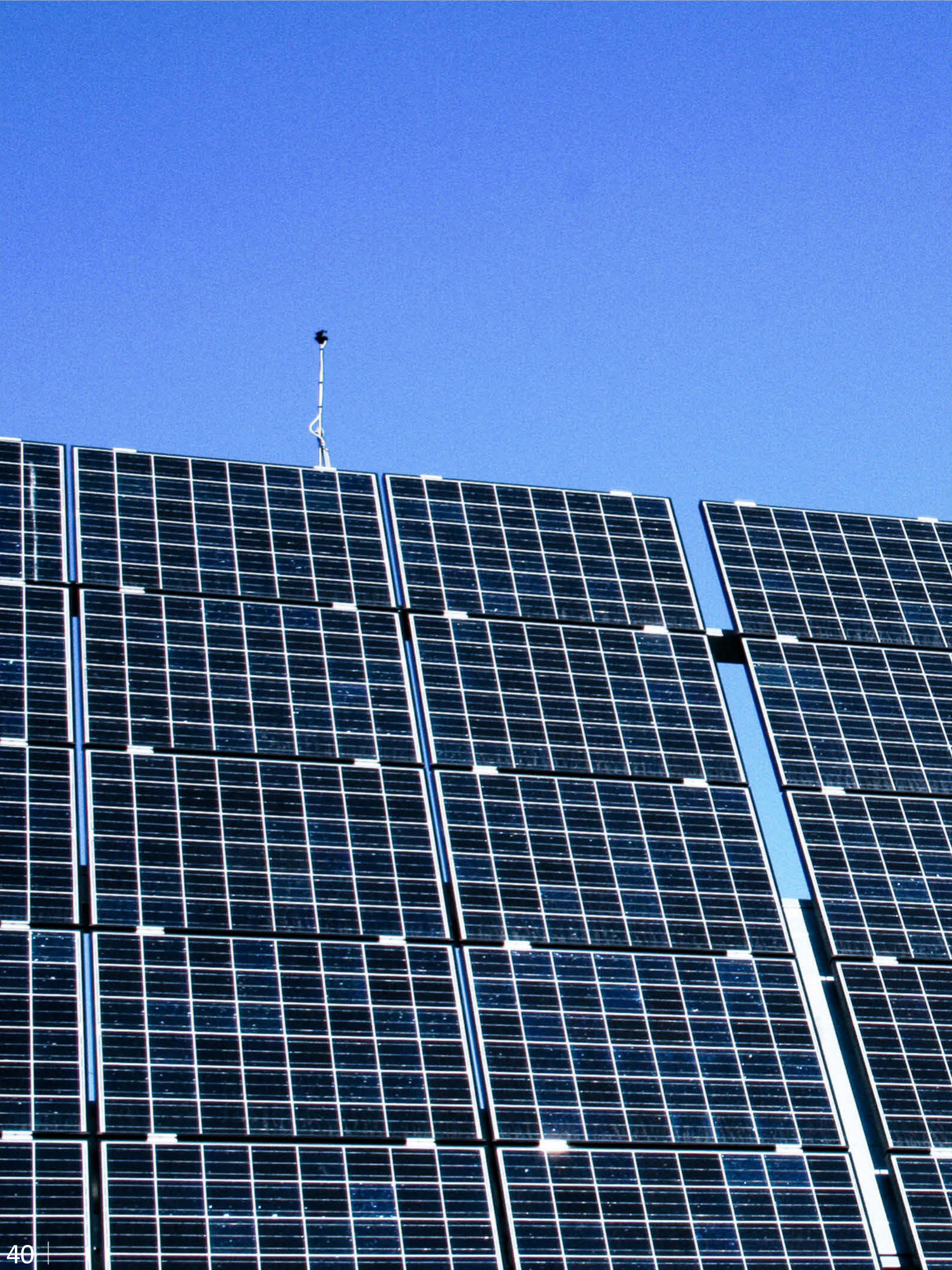
With the reviews that have already been coming in for *Avengers: Age of Ultron* on the basis of the premiere - including critics' more informal responses on social media - pointing to a serious critical hit, it looks like we can expect the film to fare similarly impressively at the box office.

Even if you aren't a diehard follower of the world of Marvel, if you like the idea of a superhero film that is simple on the surface while also delivering impressive sophistication and depth, we would seriously recommend that you catch it at your local theater in early May. ■

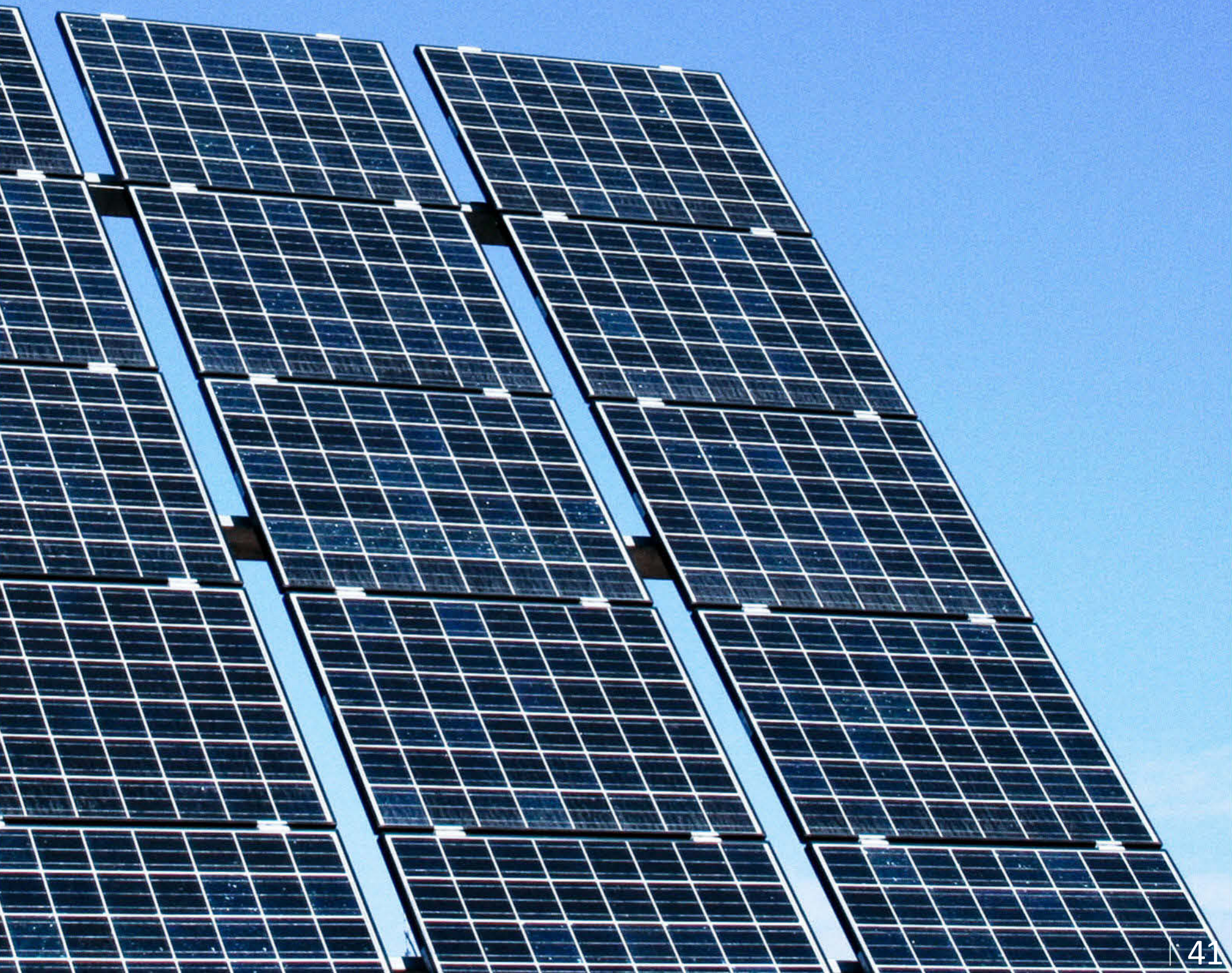
by Benjamin Kerry & Gavin Lenaghan








*APPLE DIGS IN ON GREEN
WITH CHINA SOLAR,
US FOREST PROJECTS*







In a quest to be more green, Apple says it is investing in Chinese solar power and preserving forests that make environmentally friendly paper.

The initiatives come as the tech giant this year met a self-imposed goal of powering all its U.S. operations with renewable energy to reduce carbon emissions - initiatives that have won high marks from environmental groups.

On Thursday, Apple announced a new focus on using paper from trees harvested under environmentally sound conditions. It's also promising to use more renewable power overseas, where Apple relies heavily on contract manufacturers - and where a top executive acknowledged the company can do more.

"It's important to us to tackle climate change everywhere we are," Lisa Jackson, Apple's vice president for environmental initiatives, told The Associated Press. "When you talk about China, you're talking about manufacturing partners. We're looking to bring the same innovation there. This is the start."

The new solar project in China has a capacity of 40 megawatts, which is smaller than some projects Apple has announced in the United States. By comparison, Apple is spending \$850 million for rights to nearly half the output of a 280-megawatt solar facility planned for construction south of Apple's Cupertino, California, headquarters. That project will produce enough energy to power all of Apple's California offices, a computer center and 52 retail stores.

Still, the Chinese project will produce more than the amount of energy consumed by Apple's 19 corporate offices and 21 retail stores in China and Hong Kong, Jackson said. She added that Apple uses renewable energy for 87 percent of the power at its facilities worldwide.

That figure, however, doesn't include substantial power consumption by contract manufacturers. With the new project in China, Apple is looking to improve its own operations first.





“Before we go somewhere else and start asking and eventually requiring clean energy, you want to make sure you show folks how to do it,” said Jackson, who was U.S. Environmental Protection Agency administrator during President Barack Obama’s first term.

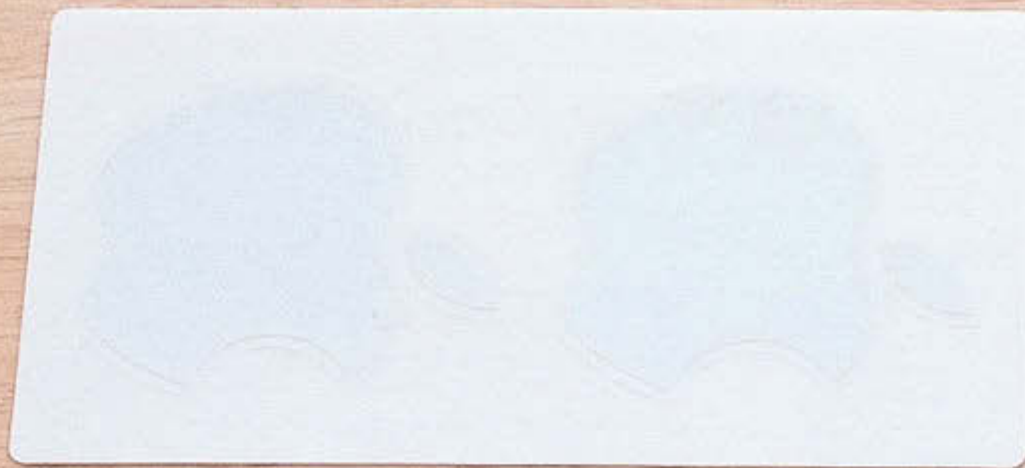
Apple and other tech companies have drawn criticism in the past for use of toxics in manufacturing and data centers powered by electricity from coal. But Apple’s moves away from those practices in recent years have won accolades from groups like Greenpeace, which issued a statement praising the Chinese project Thursday.


Jackson declined to say how much Apple is investing in the Chinese project, which is being built in partnership with U.S. energy company SunPower and four Chinese firms. Although China is known for heavy reliance on coal, its government has set aggressive goals for solar, wind and hydroelectric power.

Meanwhile, Apple pledged an unspecified amount of money for a Virginia-based nonprofit, the Conservation Fund, to purchase two large tracts of timberland on the East Coast. The Conservation Fund will resell the land - 36,000 acres of timberland in Maine and North Carolina - to commercial interests under legally binding terms that require future owners to preserve the forest and follow environmentally sound principles for cutting and replanting trees.

Larry Selzer, the group’s chief executive, said that will protect the forest while keeping it in the hands of private owners who pay taxes and create jobs. Selzer said he’ll use proceeds from reselling the land to buy and protect additional tracts.

Apple won’t necessarily buy paper made from trees on that land, but Jackson said the investment will increase the supply of sustainable wood fiber. She said the two tracts would produce about half the non-recycled wood fiber used in Apple’s product packaging last year.





iPhone Info

iPhone User Guide Review the user guide before using iPhone. Go to help.apple.com/iphone to view the user guide on iPhone, use the Safari browser, or download the user guide from the Apple Store website. Review the user guide for important information about safety, use, and care.

Safety and Handling See "Safety Handling & Support" in the iPhone User Guide.

Exposure to Radio Frequency Energy On iPhone, go to Settings > General > About > Legal > RF Exposure. See www.apple.com/legal/RFExposure.

Battery The lithium-ion battery in iPhone should be replaced only by Apple or an Apple Authorized Service Provider and must be recycled or disposed of separately from household waste. For information about battery recycling and replacement, go to www.apple.com/batteries.

Hearing Aid Compatibility (HAC) Go to www.apple.com/support/hac, or see "Hearing aids" in the iPhone User Guide.

Avoiding Hearing Damage To prevent possible hearing damage, do not listen at high volume levels for long periods. More information about sound and hearing is available online at www.apple.com/sound and in "Important safety information" in the iPhone User Guide.

Apple One Year Limited Warranty Summary Apple warrants the included hardware product and accessories against defects in materials and workmanship for one year from the date of original retail purchase. Apple does not warrant against normal wear and tear, nor damage caused by accident or abuse. To obtain service, call Apple, visit an Apple Retail Store or an Apple Authorized Service Provider—available service options depend on country in which service is requested and may be restricted to original country of sale. Call charges and international shipping charges may apply depending on location. Subject to our full terms and conditions, information on obtaining service is available at www.apple.com/legal/warranty and www.apple.com/support. If you submit a valid claim under this warranty, Apple will either repair, replace, or refund your iPhone at its own discretion. Warranty benefits are in addition to rights provided under local consumer laws. You may be required to furnish proof of purchase details when making a claim under this warranty.

For Australian Consumers: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. Apple Pty Ltd, PO Box A3629, Sydney South, NSW 1212, Tel: 131 14222.

For Brazilian Consumers: Warranty benefits are in addition to rights provided under local consumer laws, except for the 1 year warranty that already comprises the full term of legal warranty provided by the Brazilian consumer defense code (consumer law).

Regulatory Regulatory information, certification, and compliance marks specific to iPhone are available on iPhone. Go to Settings > General > About > Legal > Regulatory. Additional regulatory information is in "Safety Handling & Support" in the iPhone User Guide.

IC and FCC Compliance Statement This device complies with Industry Canada license-exempt RSS (standard). This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.






Important: The product has demonstrated EMC compliance under conditions that included the use of compliant peripheral devices and shielded cables between system components. It is important that you use compliant peripheral devices and shielded cables between system components to reduce the possibility of causing interference to radio, television, and other electronic devices.

FCC Compliance Statement: Apple Inc. hereby declares that this wireless device is in compliance with the essential requirements and other relevant provisions of the FCC Part 15.207.

A copy of the FCC Declaration of Conformity is available online at www.apple.com/iphone/compliance.

Apple's Environmental Policy is available at www.apple.com/environment.

Apple's Environmental Policy is available at www.apple.com/environment.

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That would put Apple halfway toward its goal of obtaining all its non-recycled paper products from sustainable timber. Apple wouldn't say how much paper it uses, but it says two-thirds of its paper packaging comes from recycled material. In the last three months of 2014, Apple sold more than 100 million iPhones and other gadgets, most in cardboard boxes.





A vertical screenshot from the video game Star Wars: Battlefront. The scene depicts a volcanic planet with a large Imperial Star Destroyer hovering in the sky, firing red laser beams. On the ground, a Rebel soldier in a brown jacket is running towards the viewer, while Imperial AT-AT walkers and Stormtroopers are visible in the background. The sky is filled with smoke and other spacecraft.

'STAR WARS: BATTLEFRONT' UNLEASHED AT FAN CONVENTION

The Force isn't merely awakening on the big screen. It's also returning to the video game realm.

"Star Wars: Battlefront" publisher Electronic Arts and Swedish developer DICE showcased their next-generation rendition of the "Star Wars" multiplayer shooter Friday at Star Wars Celebration, the annual fan extravaganza celebrating the sci-fi franchise.

The new iteration of "Battlefront" takes place amid the conflicts of the original film trilogy and is scheduled for release Nov. 17 for PlayStation 4, Xbox One and PCs.





“Battlefront” will focus on frenzied shoot-outs between up to 40 players portraying Rebel Alliance and Galactic Empire forces. In a demonstration of the game’s multiplayer mode, a team of jetpack-equipped rebels were shown carving their way through the woodsy Endor while Stormtroopers charged at them on foot, on speeders and within walkers, including a hulking AT-AT war machine.

Other locales teased in game footage included the snowy Hoth, sandy Tatooine and gooey Sullust, a lava-spewing planet referenced in 1983’s “Return of the Jedi,” as well as many “Star Wars” games and novels, but rarely ever seen. “Battlefront” won’t solely be centered on expendable ground troops. The game will reward sharpshooters with the ability to embody such iconic characters as bounty hunter Boba Fett and Sith baddie Darth Vader on the battlefield.

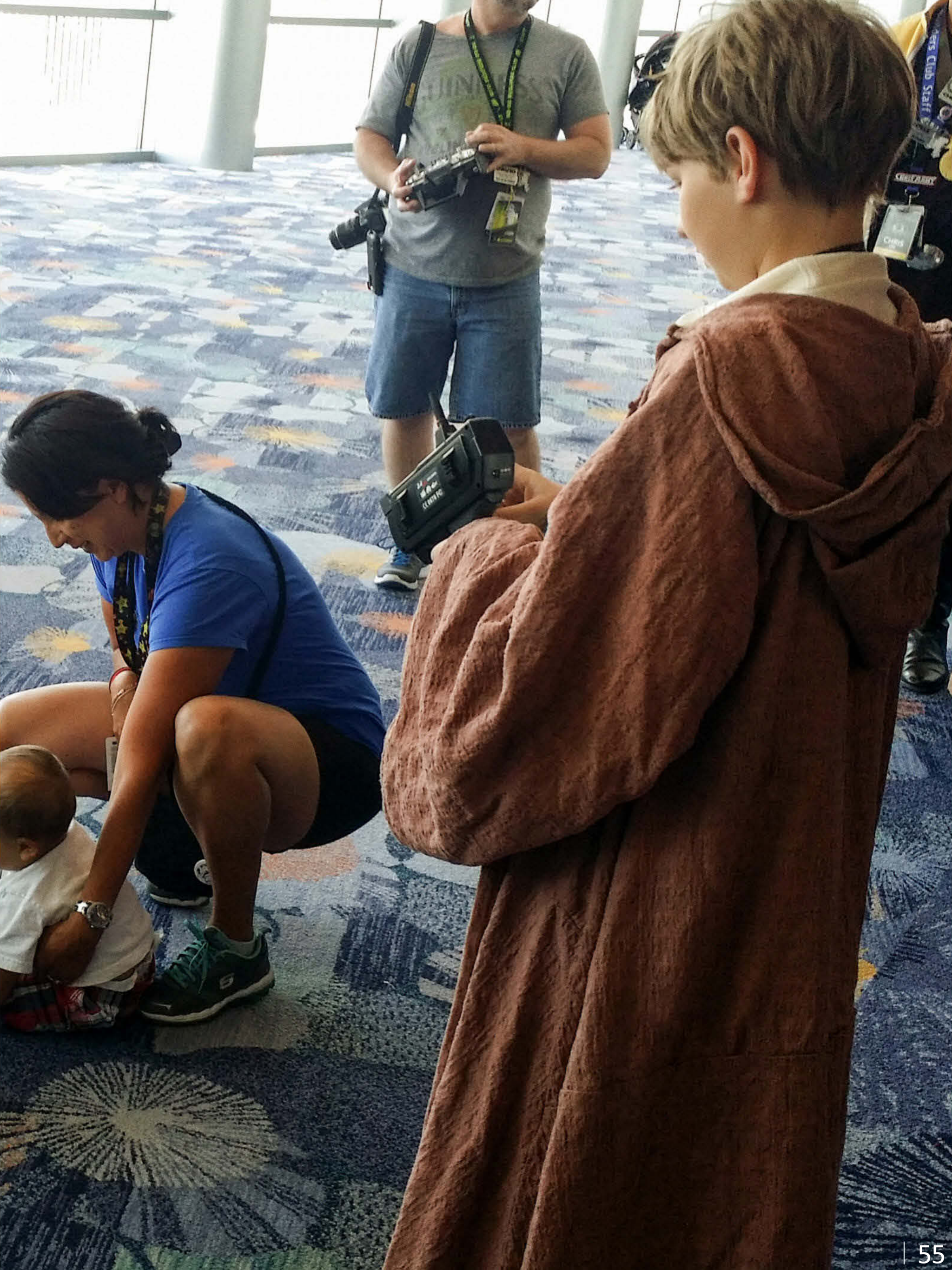
“You can storm in as the Dark Lord himself,” said “Battlefront” design director Niklas Fegraeus. “You can wield a lightsaber. You can Force choke the rebel scum, which is fun. Basically, you are the boss of the battle. This means that you, as Vader, can lead your team to victory - if you play well.”

The action will also take to the skies with players engaging in dogfights with TIE Fighters, X-wings and the Millennium Falcon, though the developers were coy about how battles would alternate between ground and air combat.













“We wanted it to feel authentic to this universe,” said “Battlefront” executive producer Patrick Bach. “You can get into these vehicles, from speeder bikes to X-wings, TIE fighters, AT-STs, AT-ATs. There’s a wide range of vehicles that we wanted to realize. The difficulty with a game is that they need to be balanced with the troops on the ground.”

“Battlefront” will also include a free downloadable level available two weeks before “Star Wars: The Force Awakens” opens in theaters Dec. 18. It’s set on Jakku, the battle-scarred desert planet glimpsed in “Force Awakens” teasers. The expansion, dubbed “Battle of Jakku,” will explore the moment following “Return of the Jedi” when the New Republic confronted Imperial holdouts on the previously unseen Outer Rim enclave.

“You never get to see it in the new movie, so it was this brilliant opportunity to recreate the Battle of Jakku, which you only see the remnants of in the movie,” said Bach. “In the game, you actually get to play the Battle of Jakku. It’s the same place from the new movie but 30 years earlier.”

The original “Battlefront” was released in 2005 by publisher LucasArts and developer Pandemic Studios. It dispensed with traditional “Star Wars” storytelling in favor of shoot-’em-up action.

The forthcoming “Battlefront,” which was first teased at the Electronic Entertainment Expo in 2013, marks the first title in a 10-year deal between the Walt Disney Co. and Electronic Arts Inc. to create new “Star Wars” games.

“We didn’t want this to be a normal licensing relationship,” said LucasArts digital business vice president Ada Duan at Celebration. “We didn’t want them to just make movie games. We wanted a deep partnership to create brand-new experiences.”

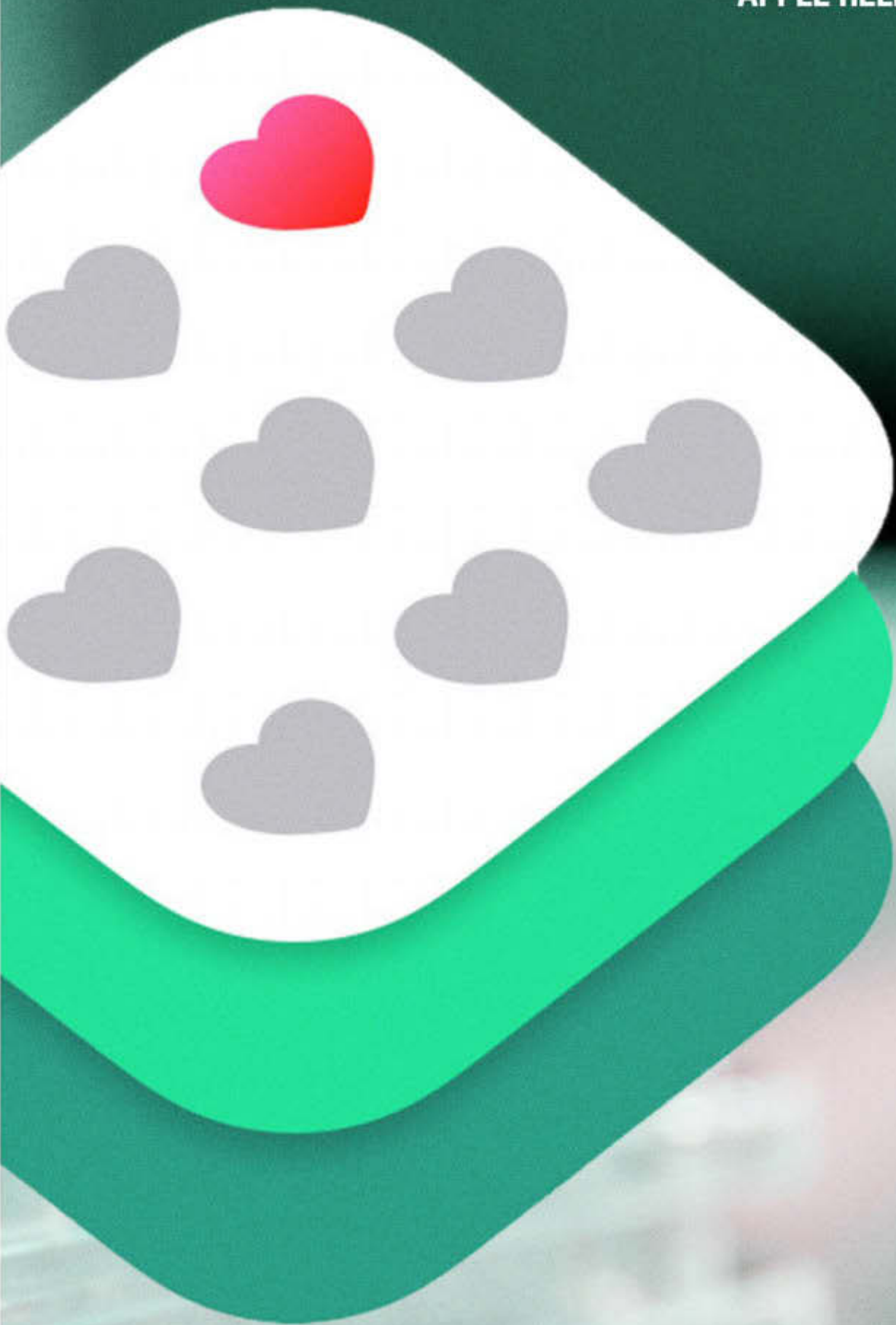
Online: <http://starwars.ea.com/battlefront>



RESEARCHKIT

ALREADY REVOLUTIONIZING MEDICAL STUDIES

APPLE HELPING TO MAKE US HEALTHIER



Cancel

Use 2 fingers to alternately tap as fast as you can for 20 seconds.

Total Taps

101

Tap

Tap






HELPING TO TACKLE PUBLIC AND PERSONAL HEALTH CHALLENGES

Few of us would argue that medical studies aren't important - indeed, for many of you reading this, they may be the reason why you are still alive now. This has not prevented difficulties with conducting such research, however, **with both inconsistent data collection and small sample sizes having long proved a hindrance.** Well, now, one of Apple's latest developments - ResearchKit - may be helping to change that.



At the latest major Apple keynote in March, **there may have been a lot to get excited about as far as new products from the Cupertino stable were concerned**, with a new MacBook being unveiled at the same time as more information was shared about the Apple Watch. However, as so often with events like these, it is so often the less glamorous developments that can actually have the most significance.





Yes, that was when ResearchKit was announced. This isn't a shiny iDevice, but a software platform, but it is nonetheless already making a big difference to the world of medical research, simply by drawing upon the wealth of health-related data from iDevice users. This open source platform enables the creation of iPhone apps that enlist users - with their permission, of course - onto medical studies, while they simply go about their daily lives.



HOW RESEARCHKIT WORKS

As you might expect, medical researchers are pretty excited about ResearchKit - indeed, some of them are already putting it to good use. Getting people to sign up for medical studies in the traditional way can be arduous to say the least, but according to Bloomberg, within a day of the launch of ResearchKit last month, thousands of people had volunteered to contribute their data.

A simply staggering 11,000 people put themselves forward for one Stanford University cardiovascular trial alone - the kind of numbers that the institution has said would not normally be achievable without a year-long national effort. All the while, the premise of ResearchKit is simple - Apple takes the data generated by its Health app and shares it with the doctors and scientists who most stand to benefit from it in their studies.



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Probably the most obvious benefit of the ResearchKit approach to garnering medical data is that there's so much of it, which even by itself, should surely help to improve the quality of findings. The automatic way in which the information is gathered also seemingly removes the risk of people simply lying about their activity levels.

NOT A HIT WITH EVERYONE

On the negative side, though, a huge number of sign-ups doesn't necessarily always deliver a sufficient number of high quality results - that depends very much on how ideal the candidates are for a given study. There are also still some questions that a doctor may need to ask directly - an app can't be depended on for absolutely everything.

Then, there are the privacy concerns that always arise with a development like this, where such immense amounts of data are changing hands. Apple has been careful to emphasize that it has taken privacy concerns seriously, stating that the choice of which studies to join is down to the user, who is also able to control what information they provide to which apps.

But there have still been some grumbles about the possibility of poorly-constructed apps allowing health data to be grabbed by hackers. **This helps to explain why Apple made ResearchKit open-source**, which means that the public can view the code underpinning the software.





In the words of Adrian Gropper, chief technology officer at the nonprofit group Patient Privacy Rights, "Open source encourages people to report the bugs in the software and get them fixed. The gold standard is open source because security by obscurity has been shown not to work."

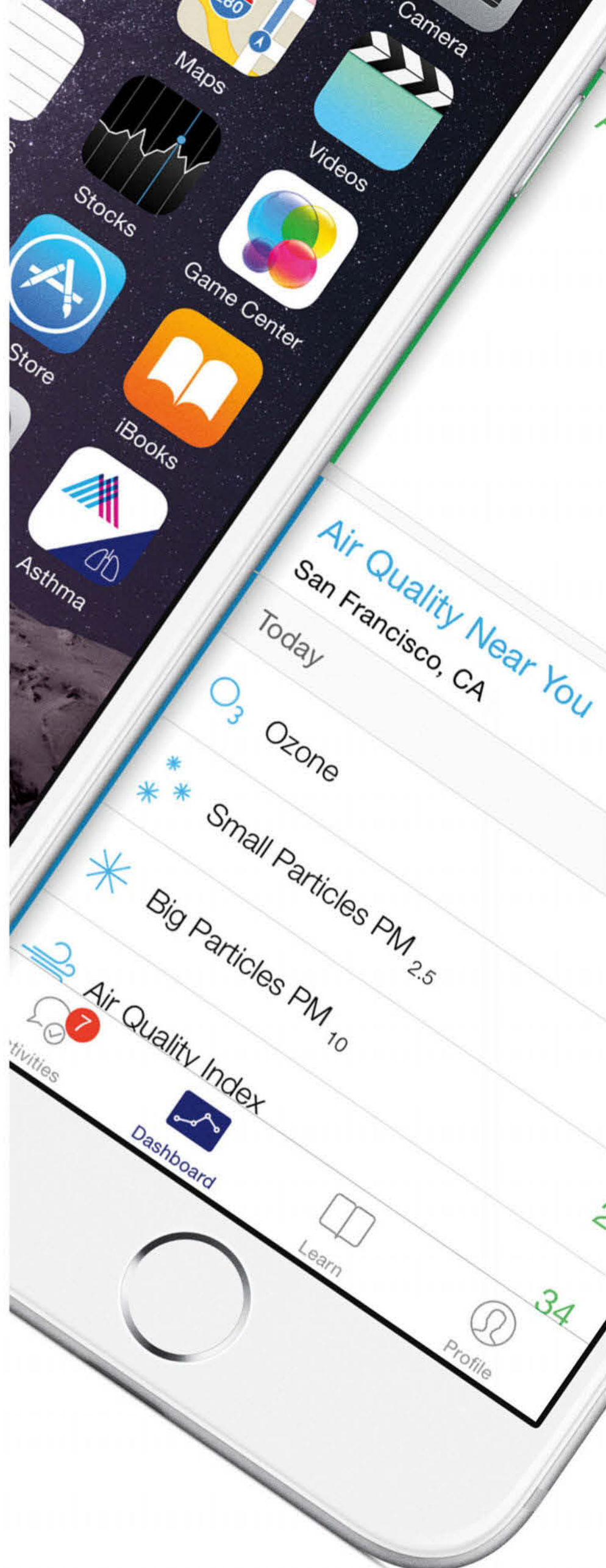
THE EARLY APPLICATIONS OF RESEARCHKIT

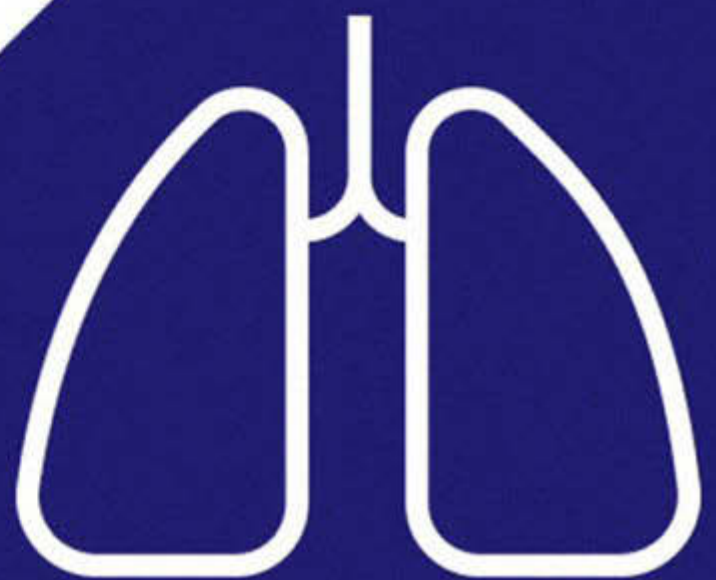
Nonetheless, it is difficult to overstate the huge change that ResearchKit represents for the world of medical research, with doctors and scientists able to use data that they know to be real, personal and up-to-date, gained from people across the United States.

Furthermore, if you wanted to see just how big a step forward it represents, you would only need to look to the first apps that have been developed from it, encompassing such areas as diabetes, asthma health, Parkinson's disease, breast cancer and cardiovascular disease.

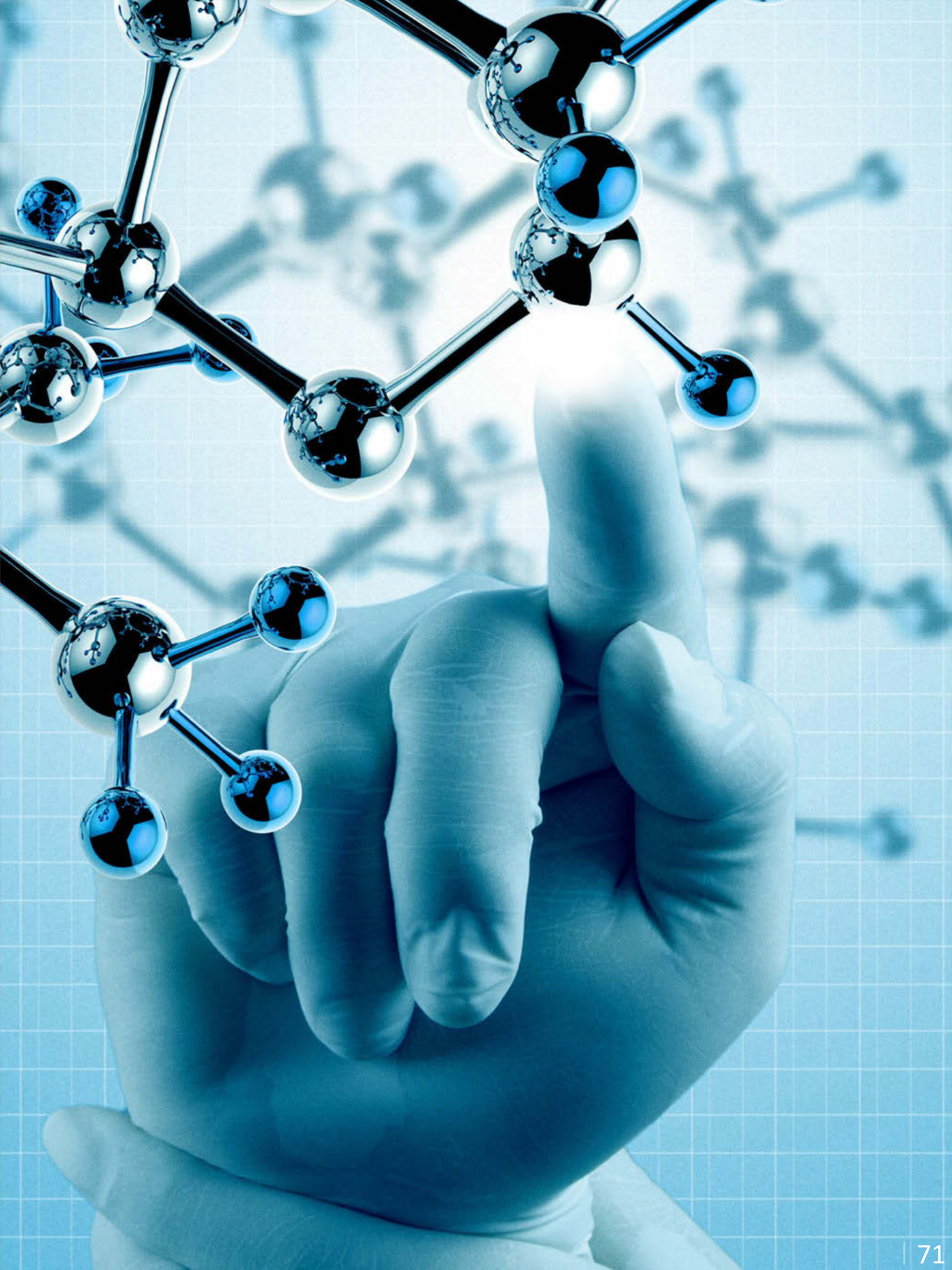
There is the Asthma Help app, for instance, which has been developed by Mount Sinai, Weill Cornell Medical College and LifeMap in order to learn more about the triggers for the disease, sufferers being helped to stay in areas with the best air quality as part of the self-management of their asthma. The tracking of symptom patterns in individuals assists researchers looking for new treatment personalization options.

Another app, mPower, is intended to help researchers to better understand the links









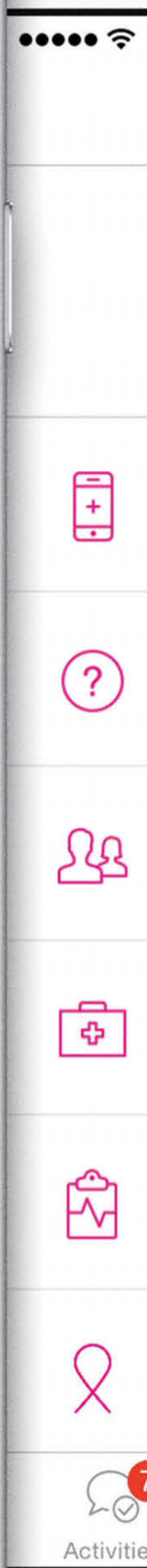
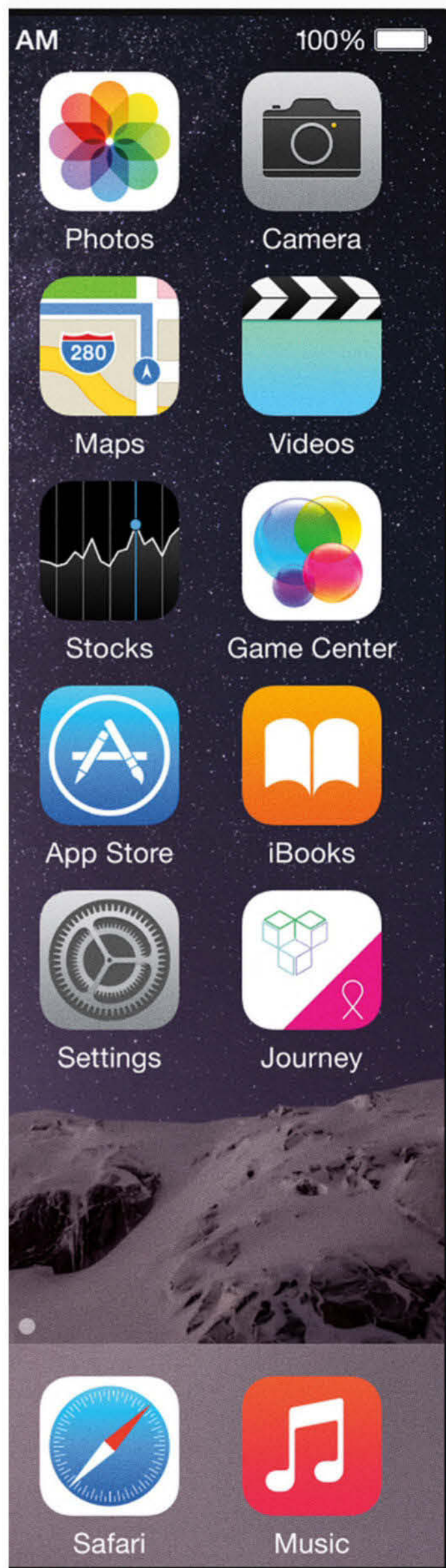
between certain symptoms and Parkinson's disease - a crucial objective, given how the sheer variability of the symptoms associated with this disease have long confused scientists. The work of the University of Rochester and Sage Bionetworks, the mPower app uses the iPhone's gyroscope to measure such parameters as the user's dexterity and gait stability.

IMPLICATIONS FOR BREAST CANCER AND CARDIOVASCULAR DISEASE


Breast cancer is another disease that may just be made a thing of the past all the sooner with the help of ResearchKit. Apple has cited the example of the Share the Journey app, which was created by the Dana-Farber Cancer Institute, the UCLA Fielding School of Public Health, Penn Medicine and Sage Bionetworks. It was conceived so that those being treated with chemotherapy for breast cancer could report on its long-term effects.

With the users of the Share the Journey app able to easily provide information on their cognitive abilities, mood and energy levels, it could help to make a big difference in future to the quality of life enjoyed by patients post-treatment.

But it doesn't necessarily need to be those who have already been diagnosed with a certain condition who can participate in the kind of useful studies that ResearchKit makes possible. The MyHeart Counts app, for instance, helps users to maintain the utmost heart health, evaluating their activity and



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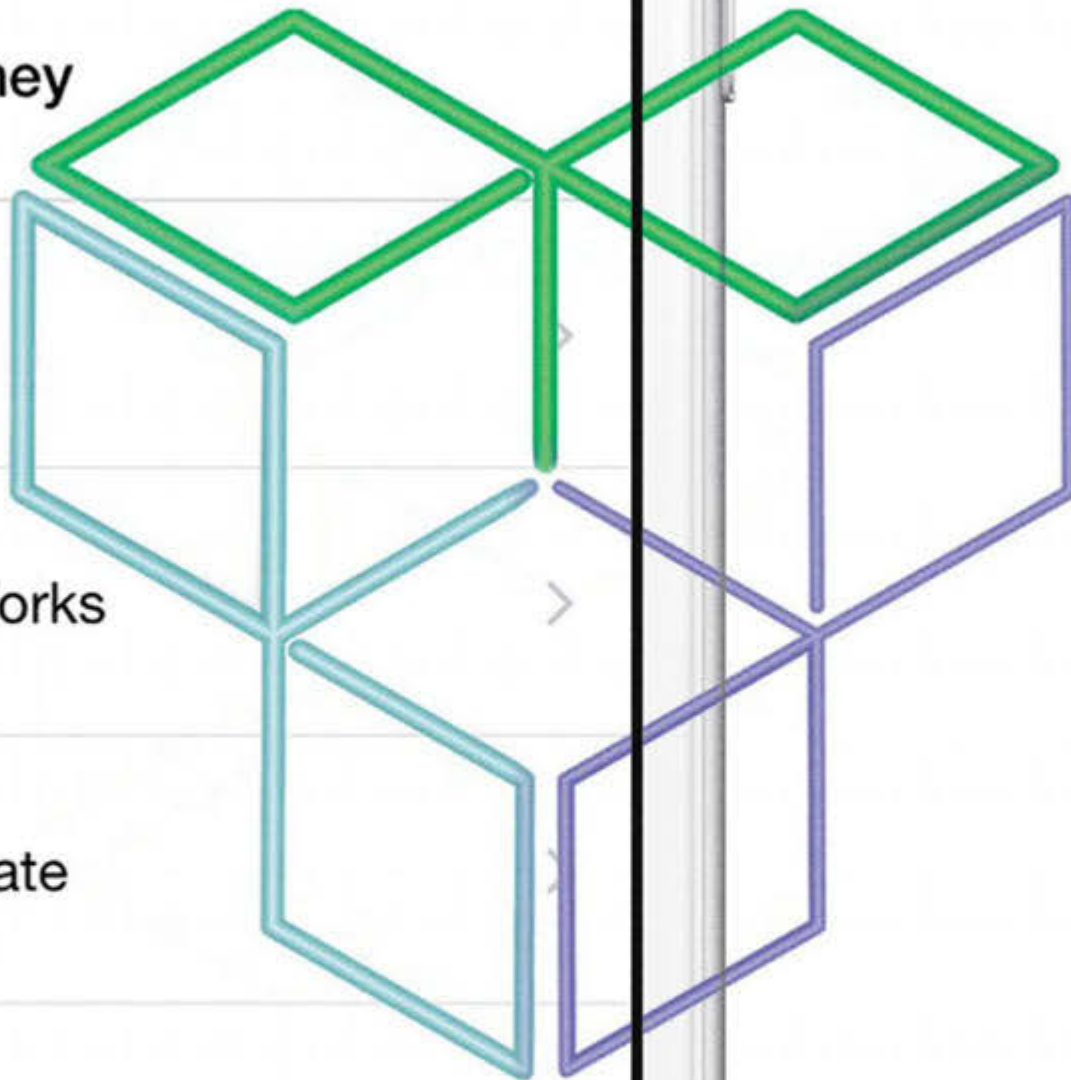
100% 

Learn



Sage
BIONETWORKS

Journey



About this Study

How this Study Works

Who Can Participate

Who is Running this Study

Symptoms

Life After Treatment



Dashboard



Learn



Profile



lifestyle and advising on their present risk of cardiovascular disease. It was developed in a collaboration between Stanford Medicine and the University of Oxford.

THEN, THERE'S DIABETES...

It's not a new suggestion that smartphone or wearable technology could be a very good thing in the lives of diabetes sufferers, and ResearchKit is already showing its use in this department. The GlucoSuccess app has been created by Massachusetts General Hospital, with the aim of learning about how a participant's blood glucose levels are affected by their physical activity, diet and medications.

The app was the work of the Center for Assessment Technology and Continuous Health (CATCH), which brings together faculty from the hospital and the Massachusetts Institute of Technology. As CATCH co-founder and co-director Dr. Stanley Shaw has observed, "As the research progresses, you really get an unprecedented database of fine grain health behaviors in the context of blood glucose measurements for large groups of people."

It's hard to deny the massive improvement that this represents on previous research methods. The traditional custom has been for diabetes patients to attend the center once every three or four years and complete a questionnaire, but with ResearchKit, scientists are able to accumulate substantial amounts of data on a daily basis.





Such frequent data collection should lend itself to accuracy, and given the ability for feedback to be given throughout the study, it also ought to be a more engaging experience for participants.

RESEARCHKIT: TRULY REVAMPING MEDICAL RESEARCH

For every one of the aforementioned conditions, ResearchKit is making a massive positive impact right now - so one can only imagine how profoundly some of the most critical medical research will be revolutionized once adoption reaches its peak. The software is perhaps another, lesser-sung example of how seriously Apple takes its mission to make the world a better place, rather than merely entice us with shiny new tech.

We certainly can't wait to learn more about the applications of ResearchKit in the years to come. ■

by Benjamin Kerry & Gavin Lenaghan







ESPN SAYS VERIZON'S NEW FiOS TV PACKAGES VIOLATE AGREEMENTS



Breaking up the cable-TV bundle won't be easy.

ESPN is objecting to how Verizon is giving its FiOS TV customers more choice. In new plans that went into effect Sunday, Verizon made the ESPN and ESPN2 sports channels optional, but ESPN says its contracts with Verizon prohibit the channels from being in a separate sports package.

Although Verizon will still offer big bundles of channels, it has been facing pressure to reduce prices amid cheaper online options. So to target the cost-conscious, Verizon launched a FiOS plan that starts at \$55 a month for a basic tier of 35 channels plus two themed channel packs. The basic channels that everyone gets include local broadcast stations, AMC, CNN and Food Network - but not ESPN or ESPN2.



There are currently seven add-on channel packs, focusing on such genres as sports, where ESPN and ESPN2 are, as well as children, pop culture and news. After picking two, customers can get additional channel packs for \$10 each.

Verizon Communications Inc. did not respond to requests for comment Monday.

Media companies such as ESPN's owner, The Walt Disney Co., Time Warner Inc. and Viacom Inc. charge distributors such as Comcast, Dish and DirecTV and Verizon's FiOS for the rights to carry their channels. Those fees are typically based on how many subscribers the channels have. By making a channel optional, Verizon can keep costs down and charge only the subscribers that want it.

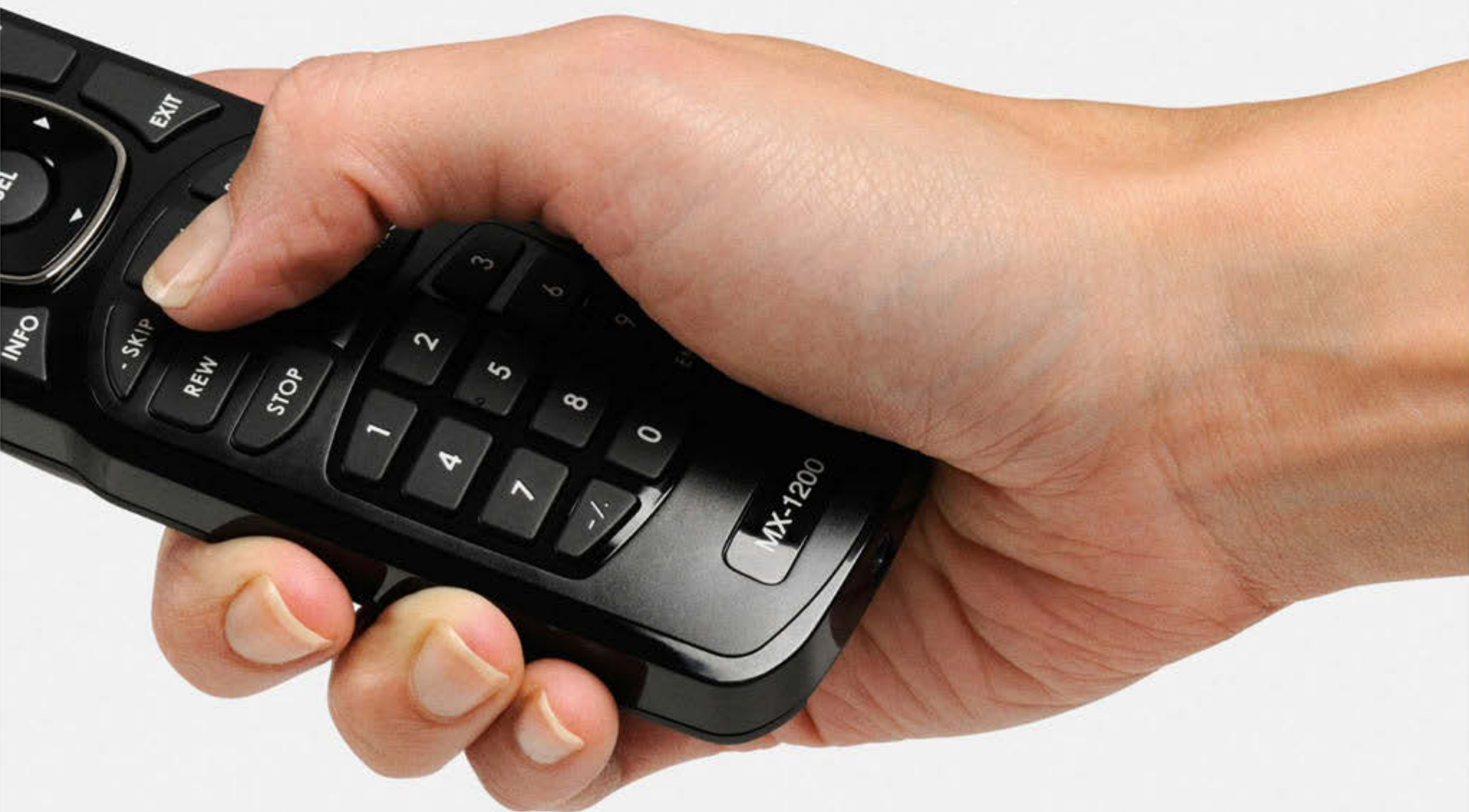




ESPN is by far the most expensive basic cable network for distributors, according to estimates from data provider SNL Kagan. It gets \$6.61 per average subscriber per month, compared with the No. 2, TNT, at \$1.65.

Dish Network's Sling TV online service does carry ESPN and ESPN2 in the basic channel group of about 20 channels. Customers can get that for \$20 a month and pay extra for additional channel packs, such as \$5 for a set of additional sports channels.

Sony's PlayStation Vue, currently available only in New York City, Chicago and Philadelphia, doesn't provide ESPN or ESPN2 at all because the service has no distribution deal with Disney.



GOOGLE SHAKING UP SEARCH RECOMMENDATIONS ON SMARTPHONES





Google is about to change the way its influential search engine recommends websites on smartphones in a shift that's expected to sway where millions of people shop, eat and find information.

The revised formula, scheduled to be released Tuesday, will favor websites that Google defines as "mobile-friendly." Websites that don't fit the description will be demoted in Google's search results on smartphones while those meeting the criteria will be more likely to appear at the top of the rankings - a prized position that can translate into more visitors and money.

Although Google's new formula won't affect searches on desktop and laptop computers, it will have a huge influence on how and where people spend their money, given that more people are relying on their smartphones to compare products in stores and look for restaurants. That's why Google's new rating system is being billed by some search experts as "Mobile-geddon."

"Some sites are going to be in for a big surprise when they find a drastic change in the amount of people visiting them from mobile devices," said Itai Sadan, CEO of website-building service Duda.



It's probably the most significant change that Google Inc. has ever made to its mobile search rankings, according to Matt McGee, editor-in-chief for Search Engine Land, a trade publication that follows every tweak that the company makes to its closely guarded algorithms.

Here are a few things to know about what's happening and why Google is doing it.



MAKING MOBILE FRIENDS

To stay in Google's good graces, websites must be designed so they load quickly on mobile devices. Content must also be easily accessible by scrolling up and down - without having to also swipe to the left or right. It also helps if all buttons for making purchases or taking other actions on the website can be easily seen and touched on smaller screens.

If a website has been designed only with PC users in mind, the graphics take longer to load on smartphones and the columns of text don't all fit on the smaller screens, to the aggravation of someone trying to read it.

Google has been urging websites to cater to mobile device for years, mainly because that is where people are increasingly searching for information.

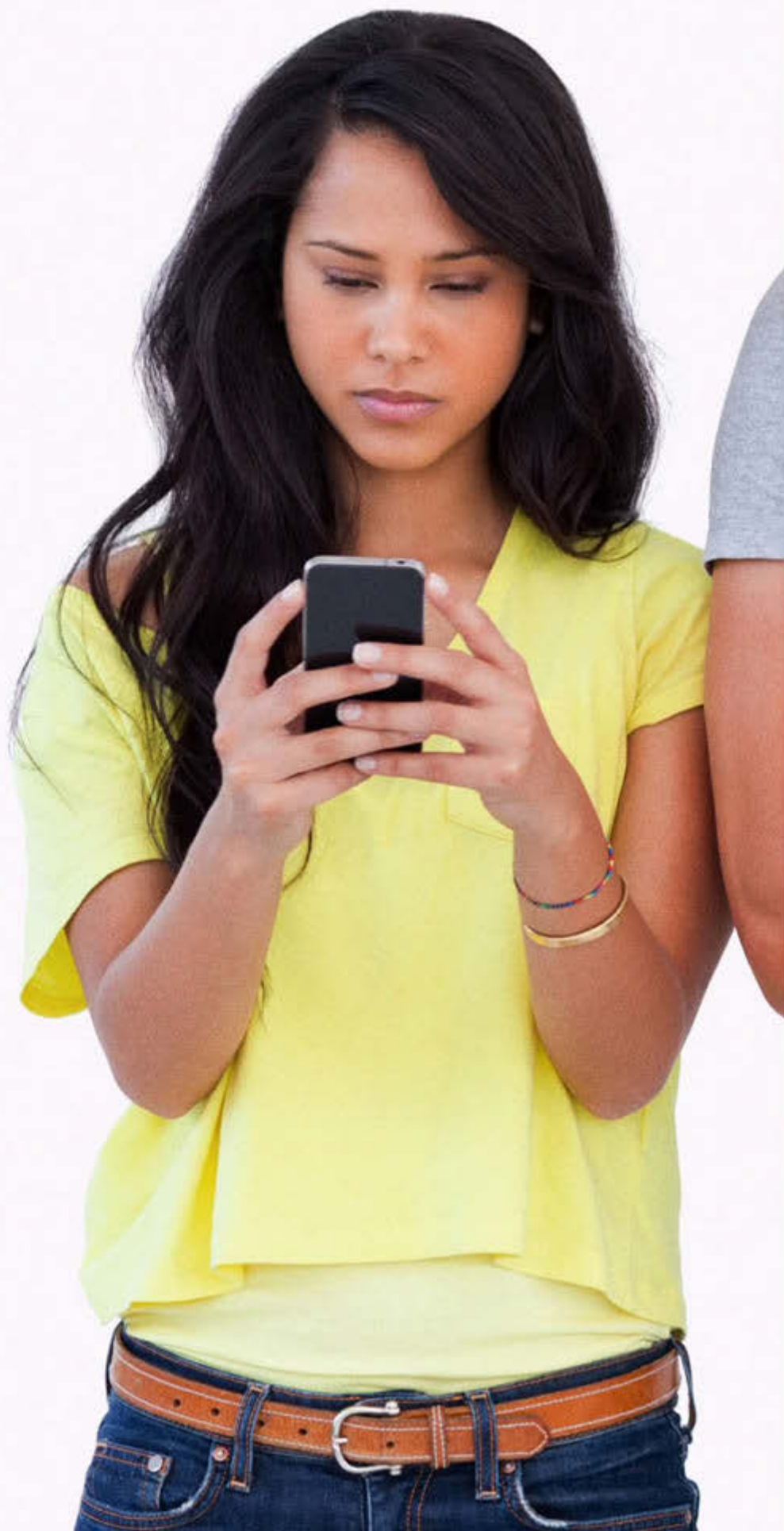
The number of mobile searches in the U.S. is rising by about 5 percent while inquiries on PCs are dipping slightly, according to research firm comScore Inc. In the final three months of last year, 29 percent of all U.S. search requests - about 18.5 billion - were made on mobile devices, comScore estimated. Google processes the bulk of searches - two-thirds in the U.S. and even more in many other countries.

BRACING FOR CHANGE

To minimize complaints, the company disclosed its plans nearly two months ago. It also created a step-by-step guide (<http://bit.ly/1GyC0ld>) and a tool to test compliance with the new standards (<http://bit.ly/1EVi9R3>).

Google has faced uproar over past changes to its search formula. Two of the bigger revisions, done in 2011 and 2012, focused on an attempt to weed out misleading websites and other digital rubbish. Although that goal sounds reasonable, many websites still complained that Google's changes unfairly demoted them in the rankings, making their content more difficult to find.

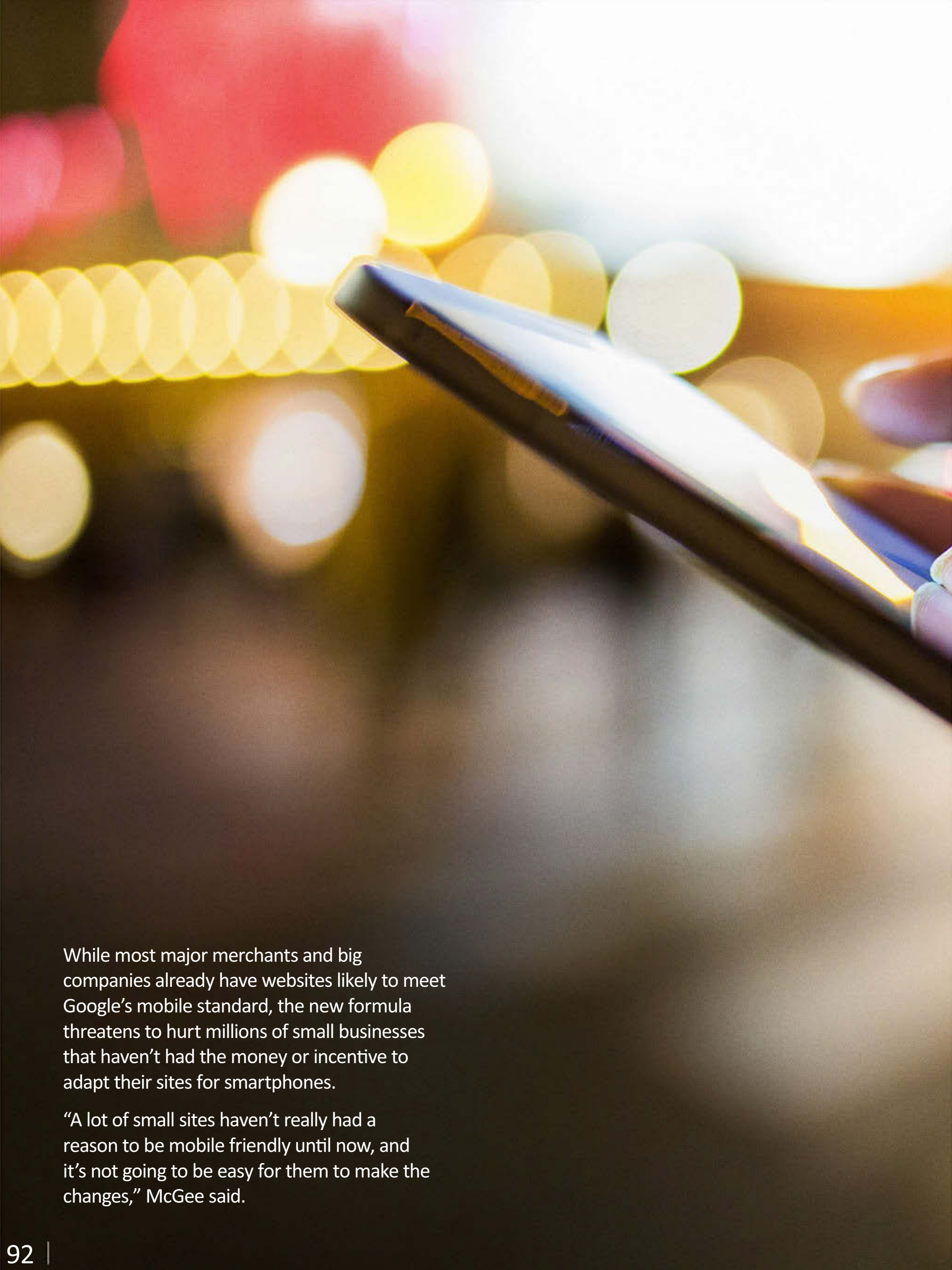
STILL CAUGHT OFF GUARD





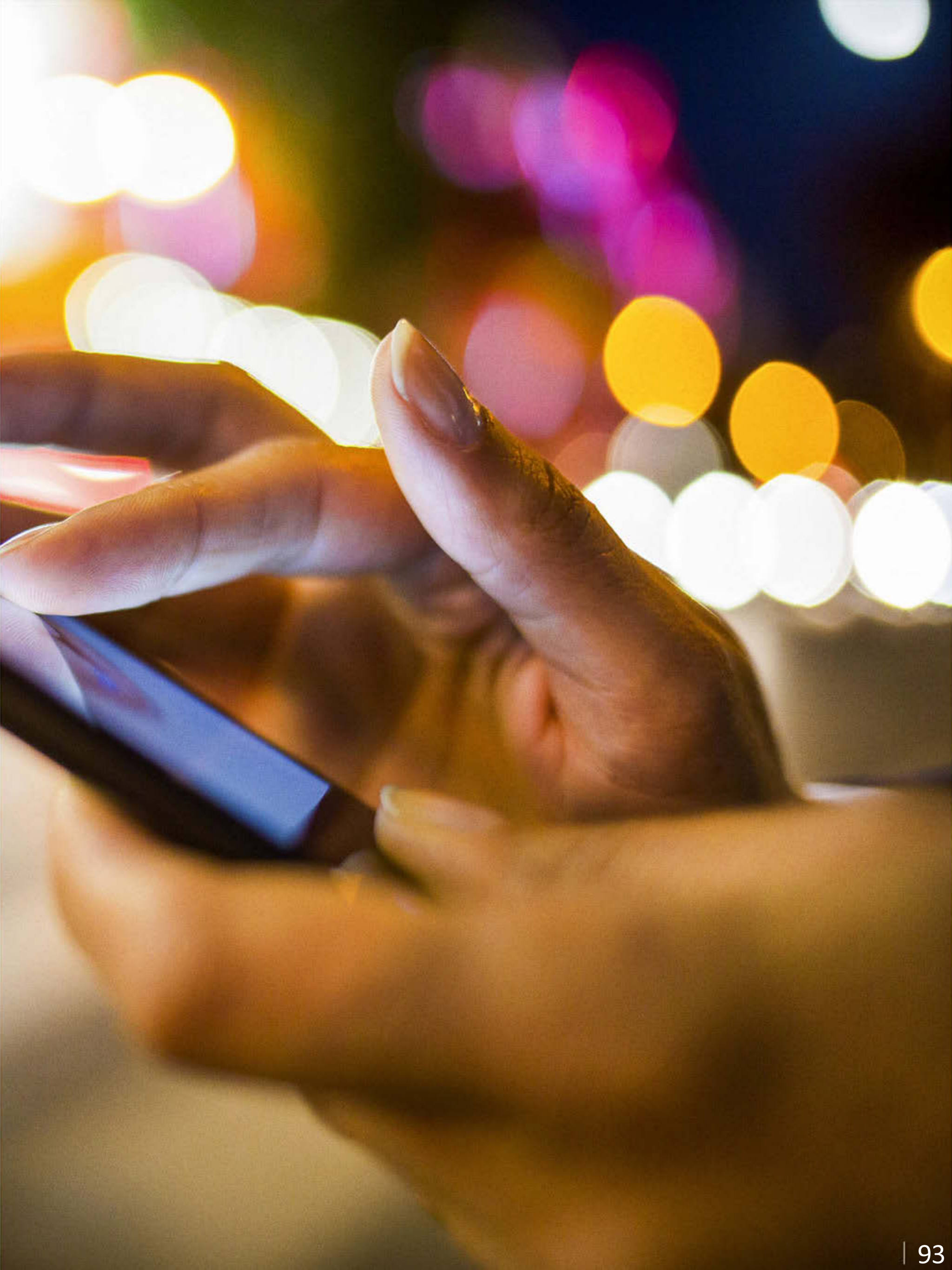






While most major merchants and big companies already have websites likely to meet Google's mobile standard, the new formula threatens to hurt millions of small businesses that haven't had the money or incentive to adapt their sites for smartphones.

"A lot of small sites haven't really had a reason to be mobile friendly until now, and it's not going to be easy for them to make the changes," McGee said.



BURYING HELPFUL CONTENT

Google's search formula weighs a variety of factors to determine the rankings of its results. One of the most important considerations has always been whether a site contains the most pertinent information sought by a search request.

But new pecking order in Google's mobile search may relegate some sites to the back pages of the search results, even if their content is more relevant to a search request than other sites that happen to be easier to access on smartphones.

That will be an unfortunate consequence, but also justifiable because a person might not even bother to look at sites that take a long time to open or difficult to read on mobile devices, Gartner analyst Whit Andrews said.

"Availability is part of relevancy," Andrews said. "A lot of people aren't going to think something is relevant if they can't get it to appear on their iPhone."





YAHOO'S 1Q SHOWS COMPANY REMAINS MIRED IN REVENUE RUT

Yahoo is still struggling to boost revenue nearly three years into CEO Marissa Mayer's tenure, magnifying concerns that the Internet company holds little value beyond its lucrative Asian investments.

The latest evidence of Yahoo's financial malaise emerged Tuesday with the release the company's first-quarter earnings report.

After accounting for ad commissions, Yahoo's revenue fell 4 percent from the same time last year to \$1.04 billion, extending a troubling trend that began before Mayer took over. That downturn overshadowed an 8 percent increase in Yahoo's total revenue, before commissions, because investors focus on the amount of money that the company retains after paying its partners for helping to draw online traffic to its ads.

Those expenses, known as traffic acquisition costs, quadrupled from the same time last year, an indication that Yahoo is paying a steep price to show its advertising.

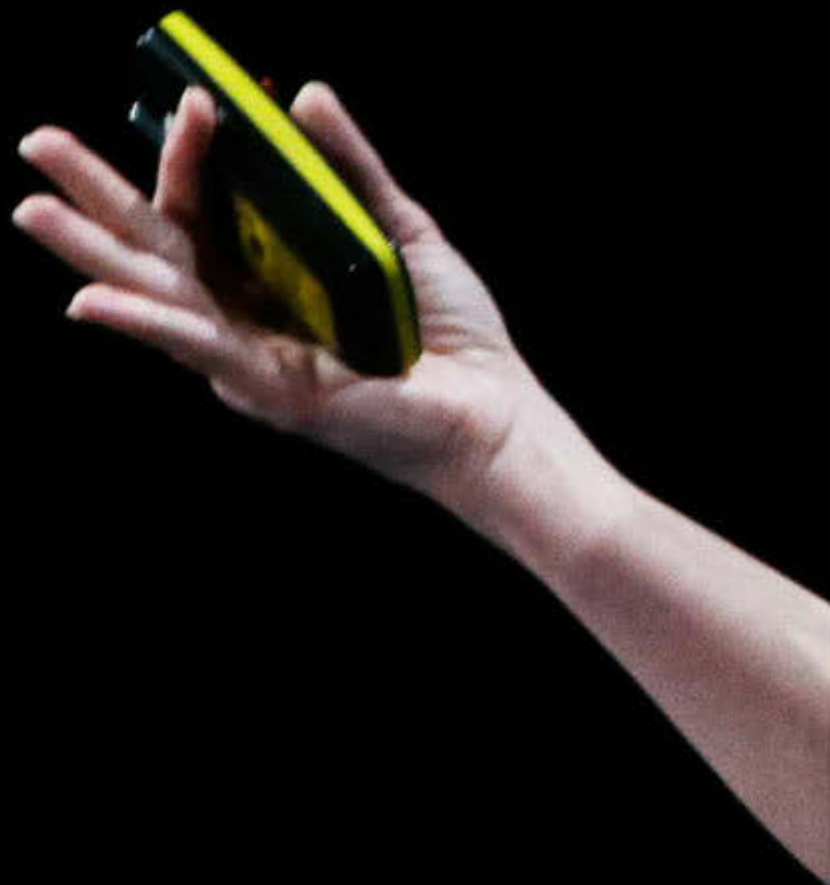
The Sunnyvale, California, company also poured substantially more money into developing new products, contributing to a steep drop in Yahoo's first-quarter earnings. Investors already had driven down the company's stock by 12 percent so far this year before Tuesday's numbers came out. The shares shed another 67 cents to \$43.82 in extended trading.

Mayer has been trying to revive Yahoo since becoming CEO in July 2012, but her efforts have been mostly unsuccessful despite a boom in the digital advertising that generates most of the company's revenue. Most of the marketing money is still flowing to Google and Facebook - a pair of companies that have supplemented their powerful advertising networks with a variety of services and features that keep people coming back.

Things were supposed to change under Mayer, a respected executive who helped build Google into the Internet's most powerful company during her tenure there. But investors appear to be losing faith now that Yahoo's revenue, after ad commissions, has declined from the previous year in eight of the past nine quarters. The only uptick, in last year's third quarter, reflected a mere 1 percent increase in revenue.

Signaling her own dissatisfaction with the company's progress, Mayer recently reshuffled Yahoo's top management. She also re-negotiated the terms of Yahoo's 5-year-old search partnership with Microsoft Corp. to give Yahoo a bigger cut of the companies' shared revenue, more control over the results on Yahoo's site and the option to sell more ads through other networks besides Microsoft's.

Yahoo is amidst a multi-year transformation to return an iconic company to greatness, Mayer said Tuesday in a statement.





Although Yahoo's stock has nearly tripled under Mayer's leadership, the run-up hasn't been driven by the company's core business. Most of the increase has been tied to Yahoo's 24 percent stake in Alibaba Group, an e-commerce star in China. Yahoo's Alibaba holdings are currently worth \$32 billion, accounting for about three-fourths of Yahoo's current market value.

Pressured by shareholders, Mayer in January announced plans to spin off the Alibaba stake into a separate company by the end of this year. The spinoff is designed to avoid paying a large tax bill on the gains from that investment.

Yahoo also owns a 35 percent stake in Yahoo Japan. The stake is currently worth nearly \$9 billion, before the taxes on the gains that the company eventually will realize. Throw in the nearly \$7 billion in cash and marketable securities that Yahoo held at the end of March, and the company's current market value of \$42 billion implies investors think Yahoo's ongoing business is worth next to nothing.





TOP Free Apps

iOS



#01 – Facebook Messenger

By Facebook, Inc.

Category: Social Networking

Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#02 – Facebook

By Facebook, Inc.

Category: Social Networking

Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#03 – YouTube

By Google, Inc.

Category: Photo & Video

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#04 – Instagram

By Instagram, Inc.

Category: Photo & Video

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#05 – Snapchat

By Snapchat, Inc.

Category: Photo & Video

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#06 – Trivia Crack

By Etermax

Category: Games

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#07 – Pandora Radio

By Pandora Media, Inc.

Category: Music

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#08 – Jelly Jump

By Ketchapp

Category: Games

Requires iOS 4.3 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#09 – Agent Alice

By wooga

Category: Games

Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#10 – iTunes U

By Apple

Category: Education

Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#01 – OS X Yosemite

By Apple

Category: Utilities

Compatibility: OS X 10.6.8 or later



#02 – Microsoft Remote Desktop

By Microsoft Corporation

Category: Business

Compatibility: OS X 10.7 or later, 64-bit processor



#03 – Slack

By Slack Technologies, Inc.

Category: Business

Compatibility: OS X 10.6 or later, 64-bit processor



#04 – App for Instagram

By Joacim Ståhl

Category: Social Networking

Compatibility: OS X 10.7 or later, 64-bit processor



#05 – Xcode

By Apple

Category: Developer Tools

Compatibility: OS X 10.8.4 or later



#06 – Kindle

By AMZN Mobile LLC

Category: Reference

Compatibility: OS X 10.6 or later



#07 – The Unarchiver

By Dag Agren

Category: Utilities

Compatibility: OS X 10.6.0 or later



#08 – Bitdefender Virus Scanner

By Bitdefender SRL

Category: Utilities

Compatibility: OS X 10.7 or later, 64-bit processor



#09 – Microsoft OneNote

By Microsoft Corporation

Category: Productivity

Compatibility: OS X 10.9 or later



#10 – Fotor Photo Editor

By Chengdu Everimaging Science and Technology Co., Ltd

Category: Photography

Compatibility: OS X 10.7 or later, 64-bit processor

TOP Free Apps

Mac OS X

TOP Paid Apps

iOS



#01 – Minecraft – Pocket Edition

By Mojang

Category: Games / Price: \$6.99

Requires iOS 5.1.1 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#02 – Trivia Crack (Ad Free)

By Etermax

Category: Games / Price: \$2.99

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#03 – Heads Up!

By Warner Bros.

Category: Games / Price: \$0.99

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#04 – Scholly: Scholarship Search

By Scholly, LLC

Category: Education / Price: \$0.99

Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#05 – Monument Valley

By ustwo™

Category: Games / Price: \$3.99

Requires iOS 6.0 or later. Compatible with iPhone 4, iPhone 4S, iPhone 5, iPhone 5c, iPhone 5s, iPhone 6, iPhone 6 Plus, iPad, and iPod touch. This app is optimized for iPhone 5.



#06 – Five Nights at Freddy's 2

By Scott Cawthon

Category: Games / Price: \$2.99

Requires iOS 5.1 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#07 – Geometry Dash

By RobTop Games AB

Category: Games / Price: \$1.99

Requires iOS 5.2 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#08 – Fruit Ninja

By Halfbrick Studios

Category: Games / Price: \$0.99

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#09 – Afterlight

By Afterlight Collective, Inc

Category: Photo & Video / Price: \$0.99

Requires iOS 6.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.



#10 – Facetune

By Lightricks Ltd.

Category: Photo & Video / Price: \$3.99

Requires iOS 6.0 or later. Compatible with iPhone 4, iPhone 4S, iPhone 5, iPhone 5c, iPhone 5s, iPhone 6, iPhone 6 Plus, iPad, and iPod touch. This app is optimized for iPhone 5, iPhone 6, and iPhone 6 Plus.



#01 – GarageBand

By Apple

Category: Music / Price: \$4.99

Compatibility: OS X 10.9 or later



#02 – AntiVirus Sentinel Pro

By Calin Popescu

Category: Utilities / Price: \$9.99

Compatibility: OS X 10.7 or later, 64-bit processor



#03 – FaceTime

By Apple

Category: Social Networking / Price: \$0.99

Compatibility: OS X 10.6.6 or later



#04 – Disk Doctor

By FIPLAB Ltd

Category: Utilities / Price: \$2.99

Compatibility: OS X 10.7.3 or later, 64-bit processor



#05 – Noiseless

By MacPhun LLC

Category: Photography / Price: \$17.99

Compatibility: OS X 10.8 or later, 64-bit processor



#06 – OS X Server

By Apple

Category: Utilities / Price: \$19.99

Compatibility: OS X 10.9.5 or later



#07 – Logic Pro X

By Apple

Category: Music / Price: \$199.99

Compatibility: OS X 10.8.4 or later, 64-bit processor



#08 – BetterSnapTool

By Andreas Hegenberg

Category: Productivity / Price: \$1.99

Compatibility: OS X 10.6 or later, 64-bit processor



#09 – Duplicate Photos Fixer Pro

By Systweak Software

Category: Photography / Price: \$0.99

Compatibility: OS X 10.7 or later



#10 – 1Password

By AgileBits Inc.

Category: Productivity / Price: \$49.99

Compatibility: OS X 10.10 or later, 64-bit processor

TOP Paid Apps

Mac OS X



iTunes

Review



Trailer

Movies & TV Shows



iTunes Preview



by Paul King
Genre: Kids & Family
Released: 2015
Price: \$14.99



125 Ratings

Rotten Tomatoes



98%

Paddington

The classic children's book character Paddington Bear finally makes his debut on the big screen, and he couldn't be more adorable in this live-action caper. The chatty and amiable animal - voiced by Ben Whishaw - turns up in London and meets the kindly Brown family, but also faces danger from a museum taxidermist (Nicole Kidman) who wants to add him to her collection.

FIVE FACTS:

1. The film is based on the Paddington Bear character created by Michael Bond.
2. The first book featuring the character, **A Bear Called Paddington, was published on October 13, 1958.**
3. The Paddington books have sold more than 35 million copies worldwide and have been translated into over 40 languages.
4. Other cast members in the film include Hugh Bonneville, Sally Hawkins, Julie Walters, Jim Broadbent and Peter Capaldi.
5. Colin Firth was initially cast as Paddington, **only to voluntarily drop out of the role after the studio decided that his voice was unsuitable.**

See more in
iTunes



Interview with Nicole Kidman





Beyond the Reach

This adventure drama thriller centers on a high-rolling corporate shark, Madec (Michael Douglas), who recruits a young guide to take him into the Mojave Desert to hunt big game. However, when Madec ends up shooting and killing an innocent man, the guide's refusal to be drawn into a cover-up leads to a deadly game of cat-and-mouse.

FIVE FACTS:

1. Beyond the Reach was directed by Jean-Baptiste Léonetti, written by Stephen Susco and co-produced by Douglas.
2. It stars Douglas alongside Jeremy Irvine, with Ronny Cox playing The Sherriff.
3. Principal photography and production **took place in and around Farmington, New Mexico.**
4. The film is based on Robb White's 1972 novel, Deathwatch.
5. It **premiered at the Toronto International Film Festival on September 6, 2014.**



Trailer

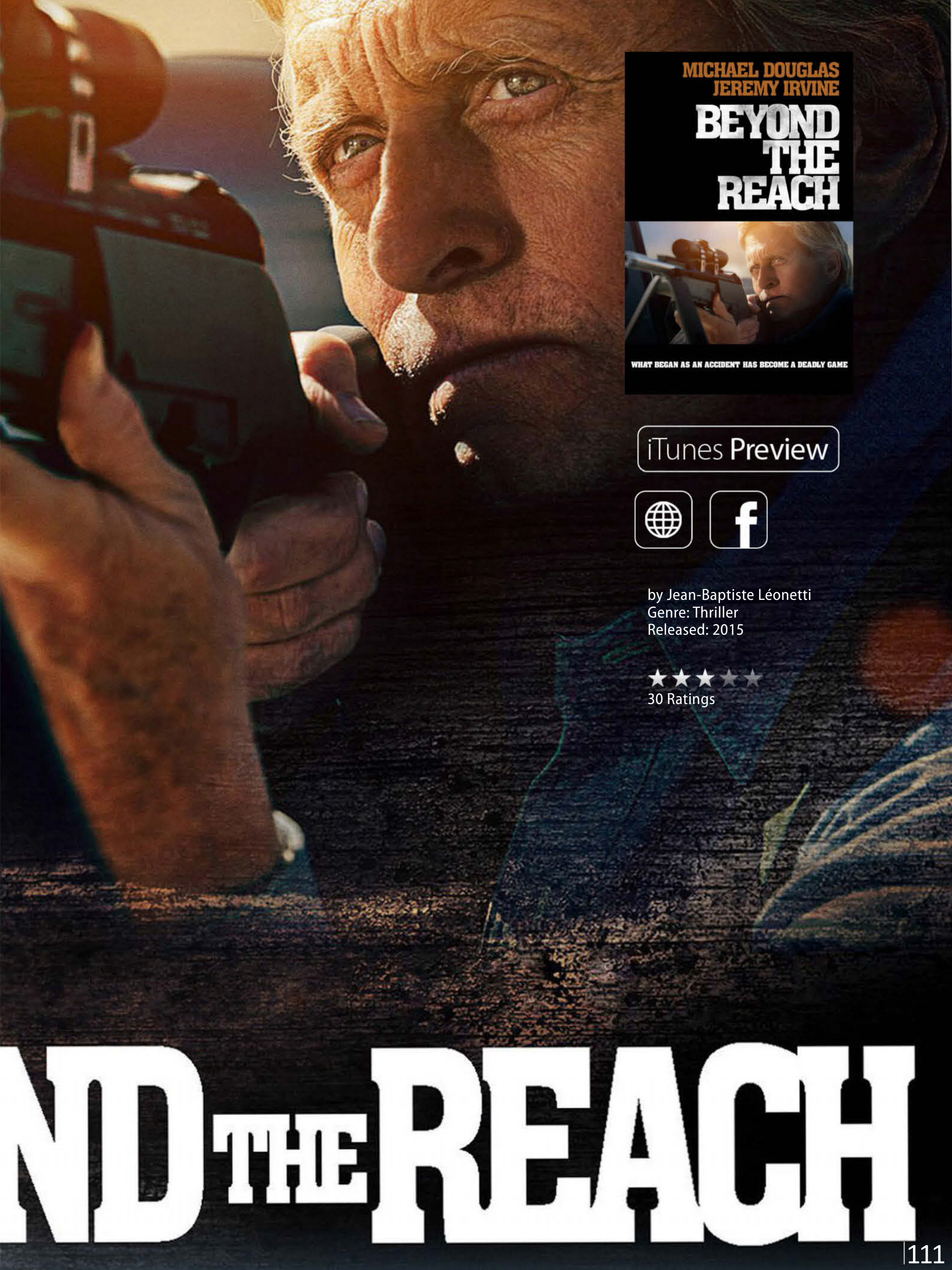
Rotten Tomatoes



34%

BEYOND





MICHAEL DOUGLAS
JEREMY IRVINE

BEYOND THE REACH



WHAT BEGAN AS AN ACCIDENT HAS BECOME A DEADLY GAME

iTunes Preview



by Jean-Baptiste Léonetti

Genre: Thriller

Released: 2015



30 Ratings

ND THE REACH



Interview with Michael Douglas and Jeremy Irvine





iTunes

Review

Music



iTunes Preview



Genre: Country
Released: Apr 14, 2015
12 Songs
Price: \$9.99



2079 Ratings



Going Out Like That

Love Somebody

McEntire

The Queen of Country follows up her number one hit single on the Country iTunes Charts, "Going Out Like That", with the associated album. McEntire's first studio album since 2010's *All the Women I Am* and the 27th of her career, *Love Somebody* was produced by the Chockie, Oklahoma native herself, alongside Tony Brown, James Stroud and Doug Sisemore.

FIVE FACTS:

1. Reba Nell McEntire was born on March 28, 1955.
2. She released her first solo album in 1977.
3. She made a commercial breakthrough with the 1984 album *My Kind of Country*, which produced the two number one singles "How Blue" and "Somebody Should Leave".
4. McEntire **has sold more than 80 million records worldwide.**
5. Of the recording process for *Love Somebody*, she has said: "Getting to work again with Allison Jones over at Nash Icon Records (part of the Big Machine Label group) was a blast! **We listened to thousands of songs to find just the right ones for this album.**"

See more in
iTunes





Interview with Reba McEntire

Handwritten (Deluxe)

Shawn Mendes

It has been a rapid rise to prominence for the 16-year old Canadian, who only began posting song covers on the popular video sharing platform, Vine, two years ago. Now with two successful singles - "Life of the Party" and "Something Big" - under his belt, he follows up his debut EP, The Shawn Mendes EP, with this promising first studio album.

FIVE FACTS:

1. Shawn Peter Raul Mendes was born on August 8, 1998 in Toronto.
2. In 2014, he caught the attention of Island Records A&R Ziggy Chareton, which led to a deal with the record label.
3. "Life of the Party" charted in the top 10 in both Canada and New Zealand.
4. He is the **youngest artist to debut in the top 25 with a debut song** on the Billboard Hot 100.
5. Handwritten features the talents of such producers as Louis Biancaniello, Teddy Geiger, Martin Terefe and Sam Watters.



iTunes Preview



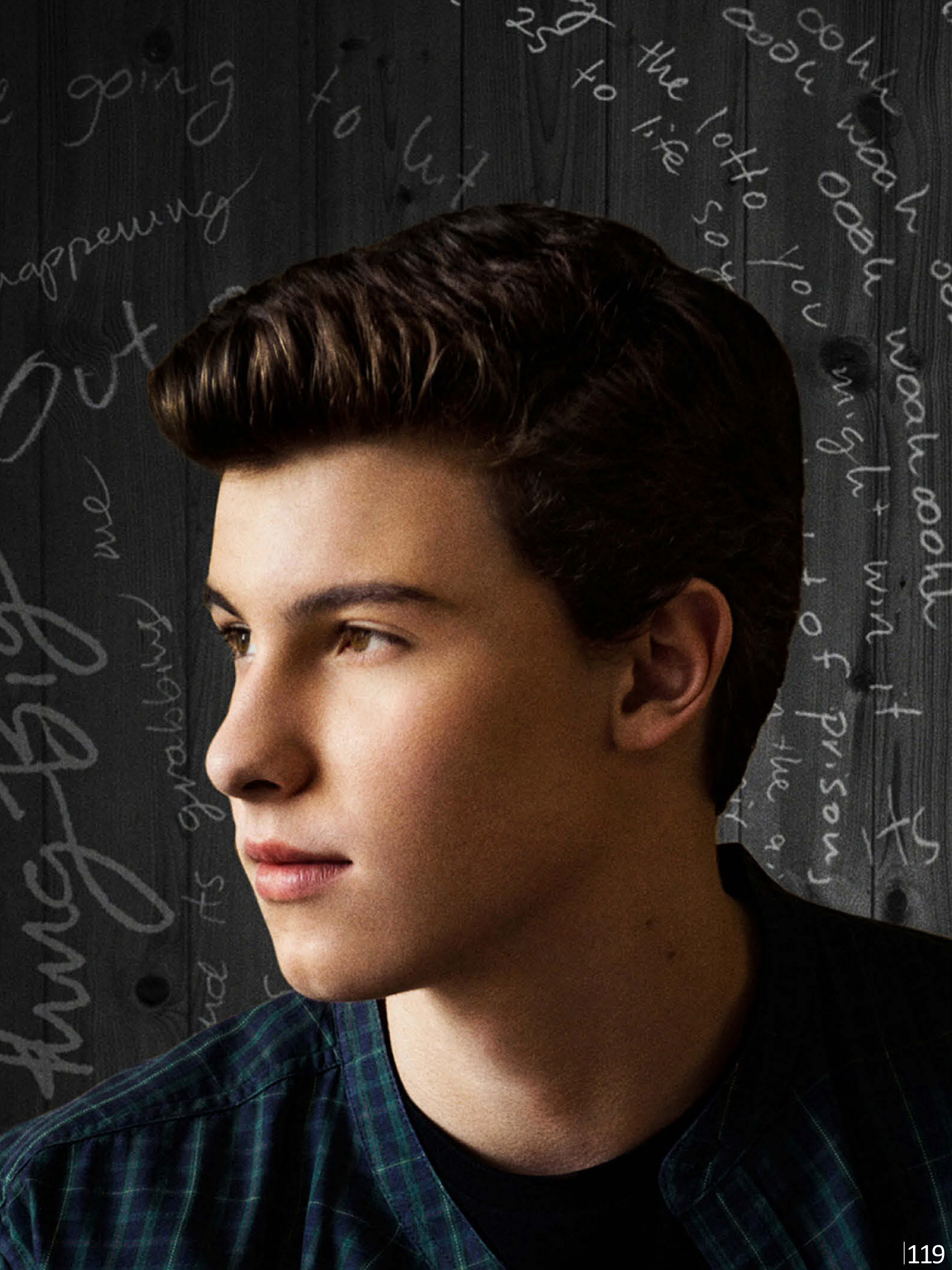
Genre: Pop
Released: Apr 14, 2015
16 Songs
Price: \$9.99



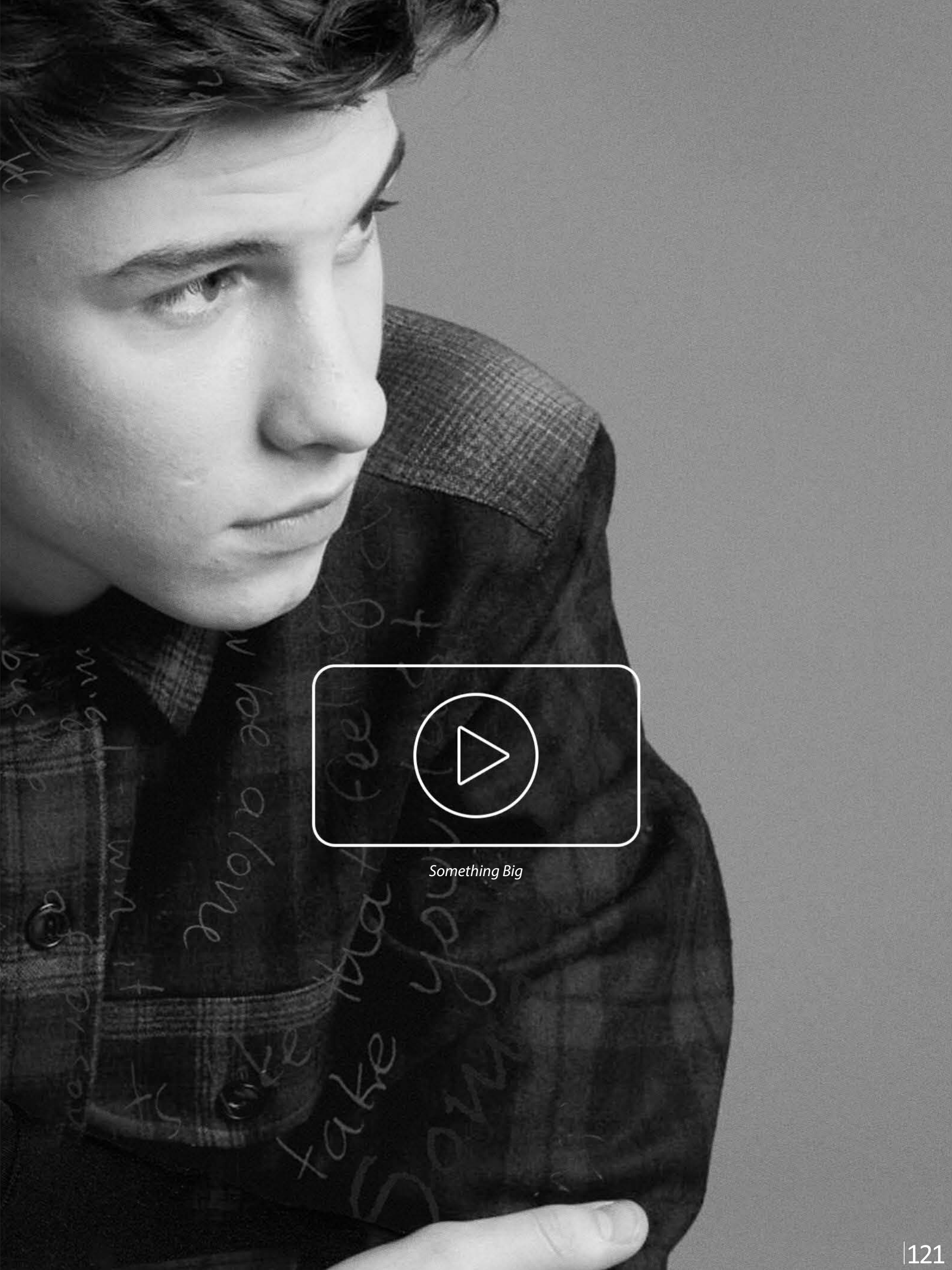
5570 Ratings



Life of the Party







Something Big

YOUR BRAND HAS NEVER BEEN IN SUCH GOOD COMPANY



APPLEMAGAZINE.COM

It's all about Apple

The right magazine for the right audience



Apple Magazine

is Now available on
Apple iPhone/iPad/Android/Windows8
and Web



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on Magzter



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App Store and search for Magzter



From your Android Tablet please go to
Google Play and search for Magzter



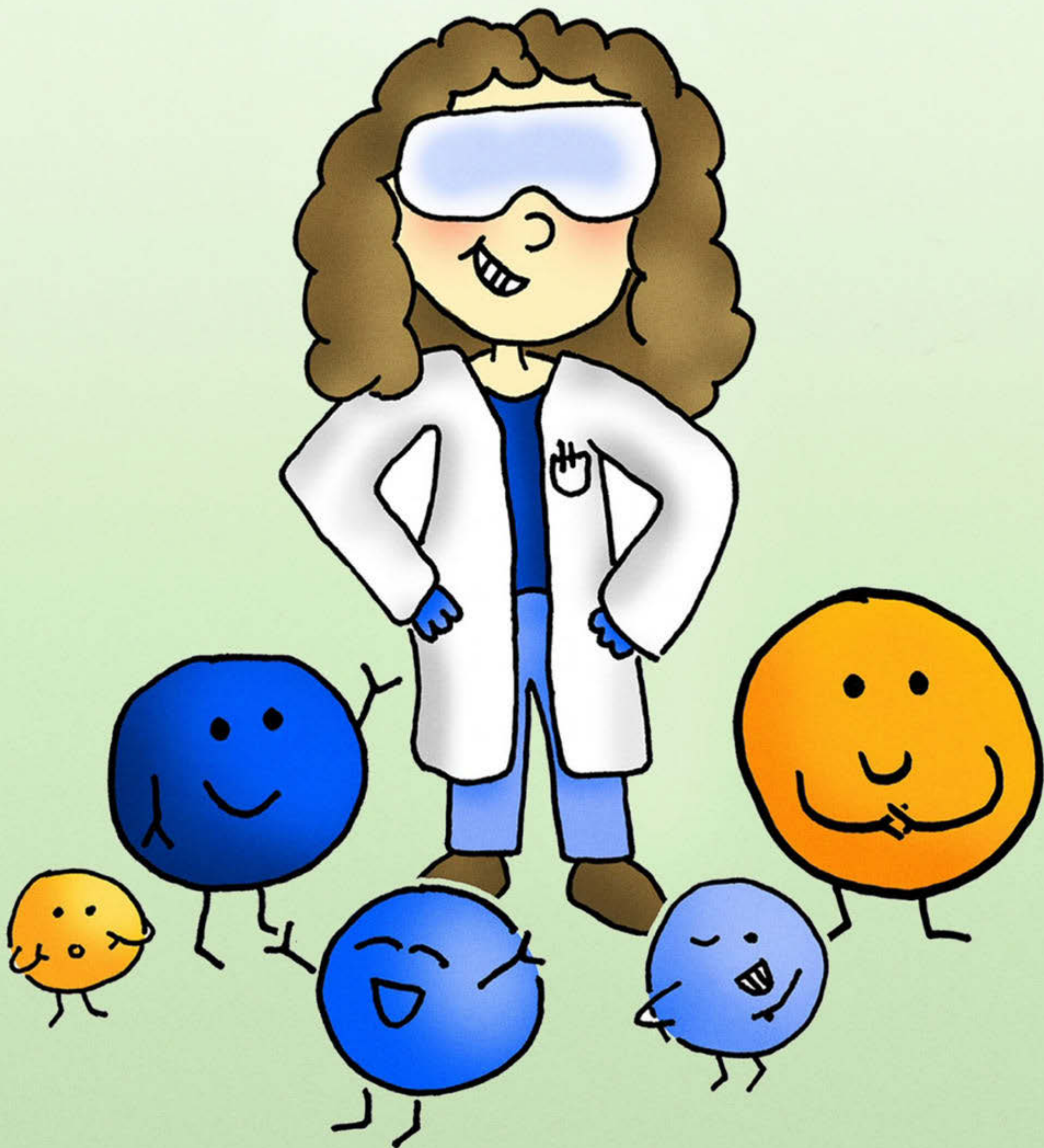
From your Windows8 device please go to
Windows Store and search for Magzter

<http://www.magzter.com>

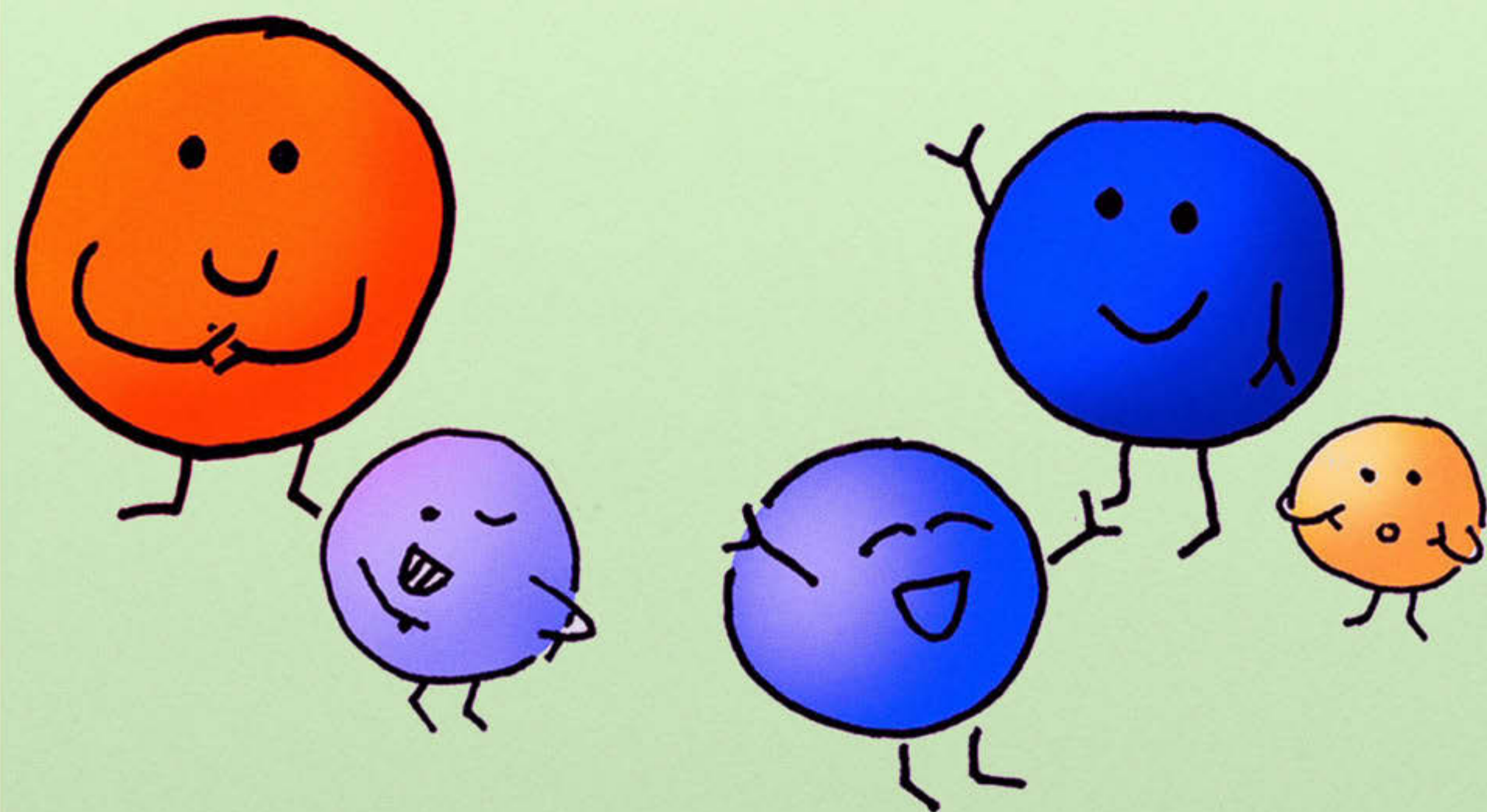


/MobileMagzter

SCIENCE



CHEMISTRY
PH.D. STUDENT
ILLUSTRATES
HER THESIS IN
COMIC BOOK



Late last spring, a doctoral student worked late into the night. As she doodled, her chemistry thesis took on a life of its own, transforming into a comic book.

Veronica Berns, 28, was working on her Ph. D. in chemistry at the University of Wisconsin-Madison. Berns said she long struggled to explain her work to her parents and friends. The self-described comic book fan said she began drafting her thesis on quasicrystals - a subset of crystals that diverge from the usual structural characteristics of crystals. Berns quickly concluded that she would be best able to describe the oddball compounds with illustrations.

"They're not very well-polished illustrations. That's on purpose," Berns said. "I wanted it to be like I'm explaining on the back of an envelope."

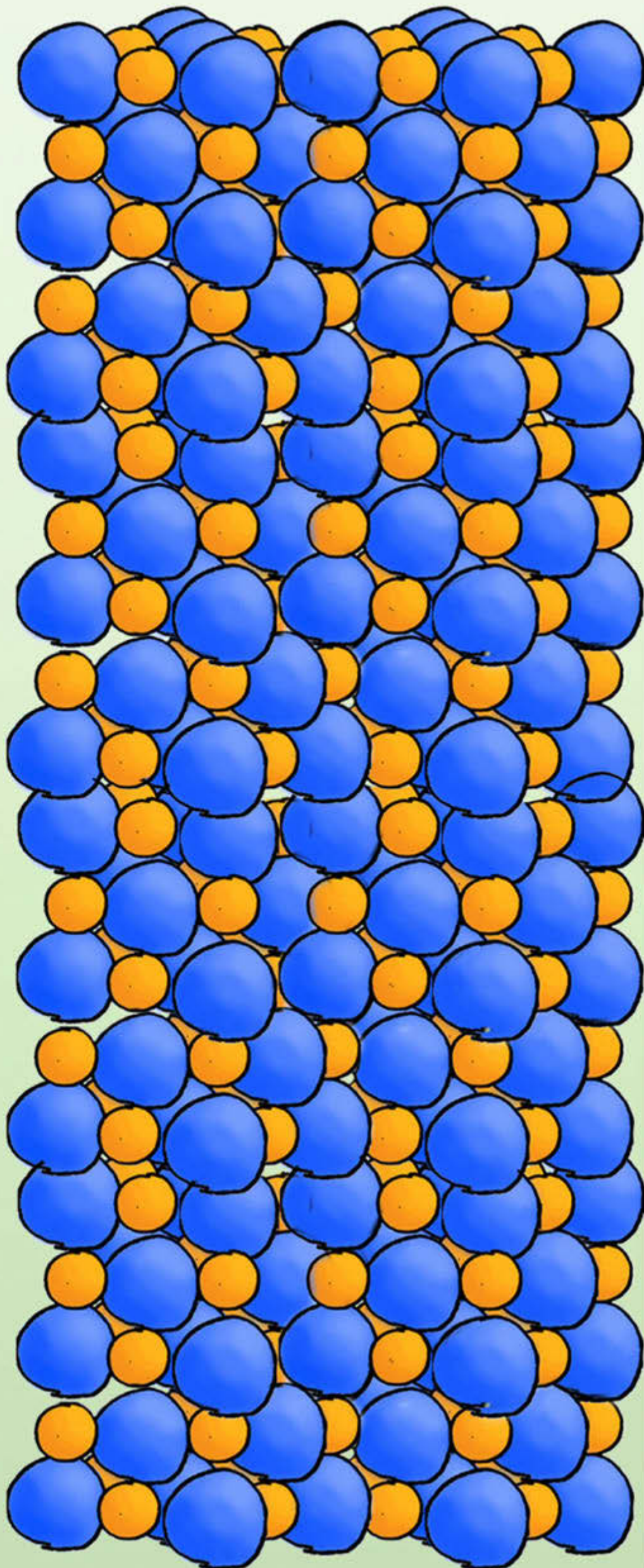
And on many occasions, it was on the back of an envelope or on a napkin that she doodled sketches of the chemical bonds to better show her parents what she was working on in the lab. Jody Berns, Veronica's mother, said their family has a history of doodling and has shared comics for years.

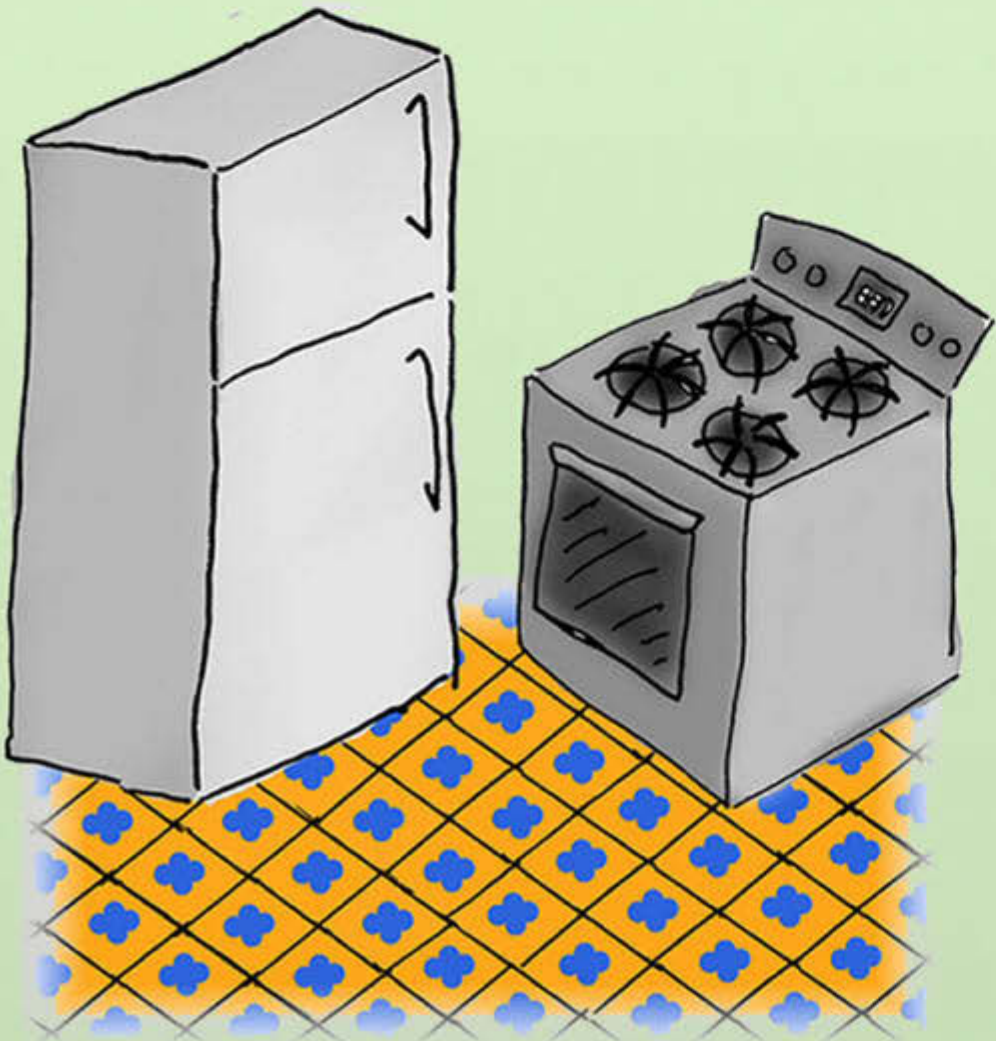
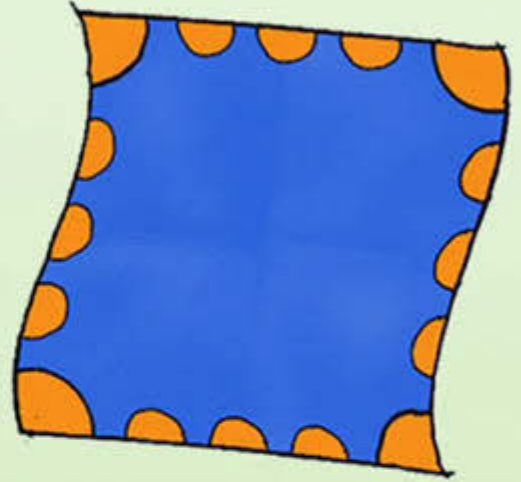
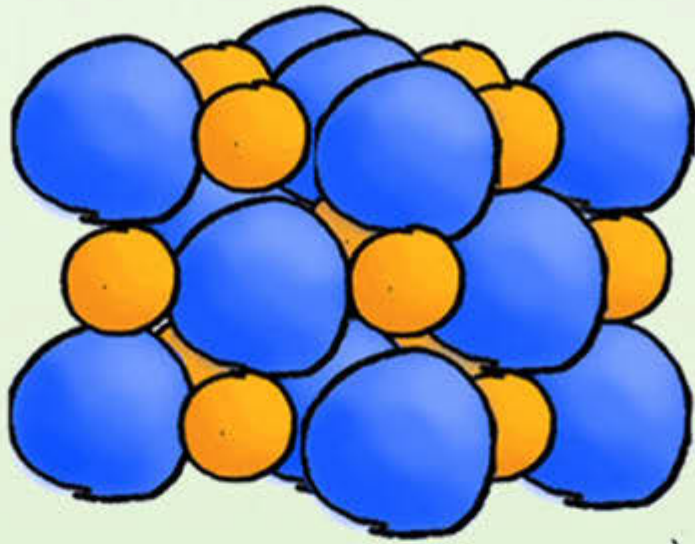
Berns surprised her family with her comic book "Atomic Size Matters" at her graduation last year. The book depicts cartoons of Berns wearing various costumes and uses humor as well as simple comparisons to describe elaborate chemistry.

"We're just really proud that she can take something so complex and put it into a fun visual explanation that everyone can enjoy," Jody Berns said.

Veronica Berns' professor Danny Fredrickson said Berns was the first of his students to construct her thesis in an artistic way. He said often it is difficult for scientists to explain what they do with proper context.

"If it's worth doing, we should be able to explain it," Fredrickson said.



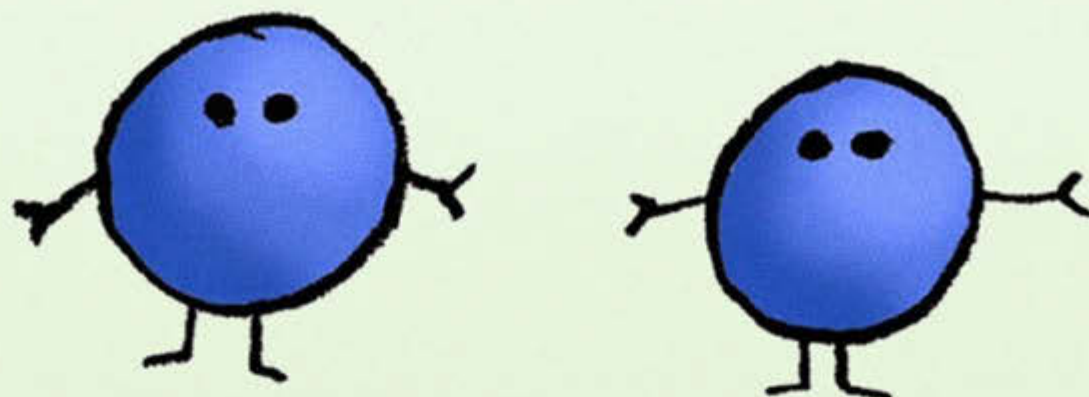


And he said Berns managed to accomplish that.

Berns said she hopes other scientists will find ways to illustrate what they're doing in the lab. She now lives in Chicago and works as a chemist. Berns also writes a blog in which she uses comics to explain the work of Nobel Prize winning scientists.

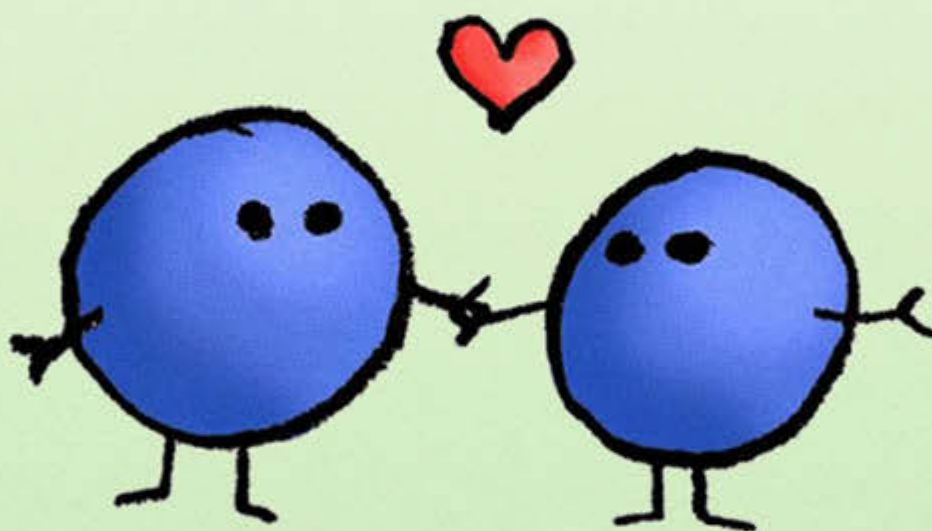
Berns started a Kickstarter fundraising campaign to finance printing a small batch of the books. She said she wanted to raise \$5,965 to cover the costs of professional printing. The website says she has raised more than \$14,000.



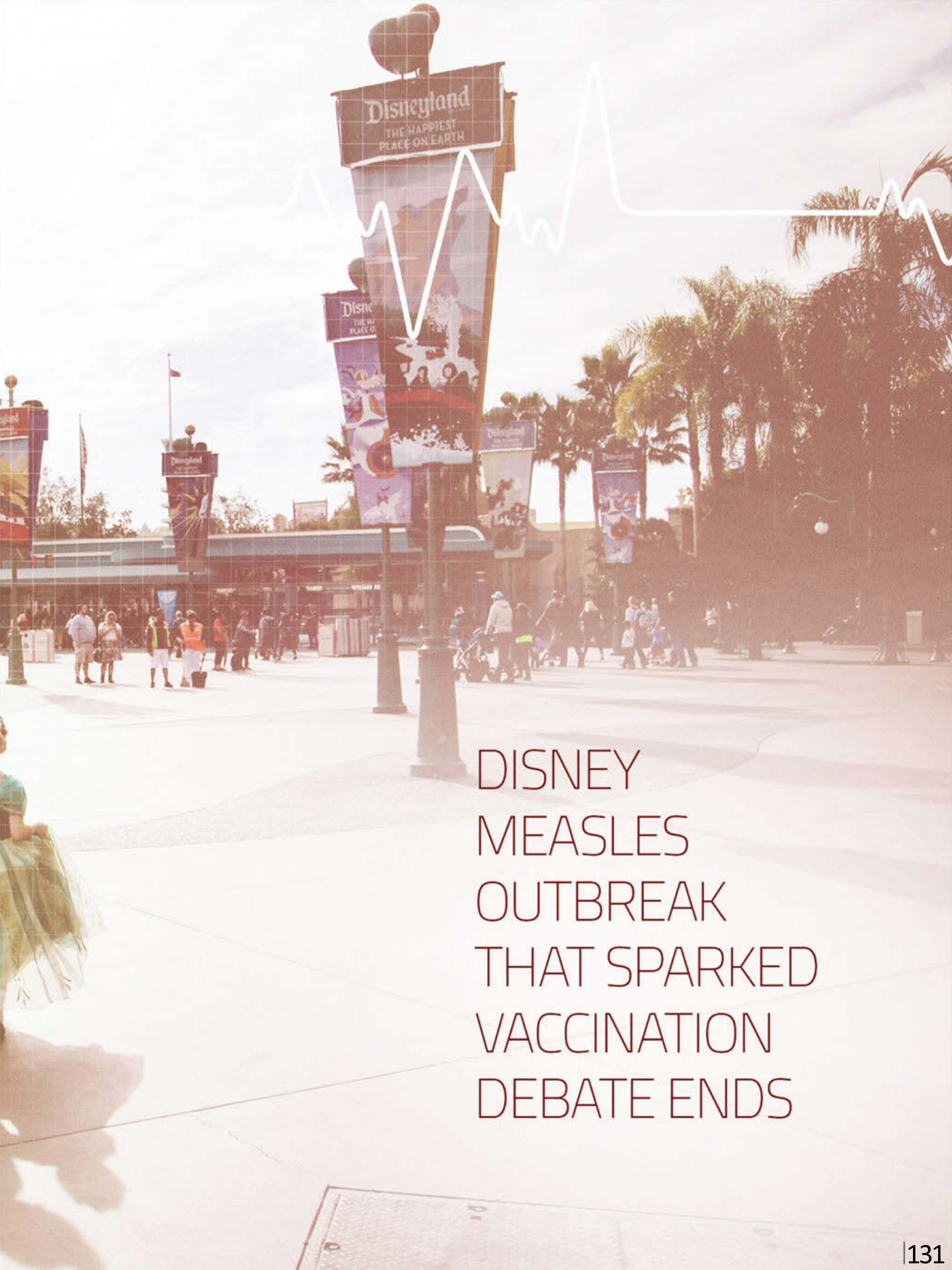


LET'S SAY THAT WE HAVE TWO HYDROGEN ATOMS.
JUST THE TWO HYDROGEN ATOMS, AND NOTHING ELSE NEARBY.

THE BONDING POTENTIAL TELLS YOU HOW MUCH THE HYDROGENS
BENEFIT FROM BEING NEAR ONE ANOTHER, FROM CHEMICALLY BONDING.







DISNEY
MEASLES
OUTBREAK
THAT SPARKED
VACCINATION
DEBATE ENDS





An outbreak of measles that popped up at Disneyland in late December soon spread to six other U.S. states, Mexico and Canada. Health officials suspect an infected traveler, who caught the virus overseas, visited the theme park and exposed others.

The outbreak sickened 147 people in the U.S., including 131 in California. No deaths were reported.

The California Department of Public Health on Friday declared the outbreak over after no new cases appeared in the last 42 days, or two incubation periods.

HOW IT STARTED

The identity of the person responsible for spreading measles at Disney theme parks in Southern California will likely forever remain a mystery. Because there haven't been homegrown measles cases in the U.S. for more than a decade, health experts believe the virus came from abroad where the airborne disease is still common.

The outbreak probably began with a cough or sneeze. Measles is highly contagious and spreads easily through the air and in closed spaces. Infected droplets can linger for up to two hours after the sick person leaves.

HOW IT SPREAD

Health officials said 42 people were exposed to measles while visiting or working at Disneyland in December. More than two dozen family members or close friends fell ill after coming into contact with the initial cases.

Other places were hit with the virus, including hospitals, malls, airports and schools. About 20 percent of patients were hospitalized.





There were cases where the source was unknown. Because the measles strain was the same, health officials consider them part of the Disneyland outbreak.

WHY IT GOT ATTENTION

Measles outbreaks are relatively rare in the U.S. Past outbreaks mainly occurred in communities with low vaccination rates.

The Disneyland outbreak occurred at a major tourist destination filled with visitors from around the globe. People who were infected at the theme parks then traveled home with the virus, where it continued to spread.

THE PUBLIC HEALTH RESPONSE

Disease investigators tracked down thousands of people potentially exposed to measles. Those considered at-risk received the measles-mumps-rubella vaccine. Sick patients were asked to place themselves in isolation until the infectious period passed. Schools sent unvaccinated students home.

Health experts said the quick response prevented the outbreak from getting worse.

“They did a tremendous job,” said Dr .James Cherry, an infectious disease expert at the University of California, Los Angeles.





THE VACCINE DEBATE

The outbreak cast a spotlight on the anti-vaccine movement. Parents who oppose vaccines for their children for personal reasons found themselves on the defensive.

As infections mounted, several state legislatures tried to make it harder for parents to opt out of vaccinations.

In California, a bill that would prevent parents from seeking vaccine exemptions for their children because of personal beliefs generated heated discussion in Sacramento. A vote was delayed until next week.





TOP

10 SONGS

UPTOWN FUNK (FEAT. BRUNO MARS)

MARK RONSON

THINKING OUT LOUD

ED SHEERAN

**LOVE ME LIKE YOU DO
(FROM "FIFTY SHADES OF GREY")**

ELLIE GOULDING

FOUR FIVE SECONDS

RIHANNA AND KANYE WEST AND PAUL MCCARTNEY

**EARNED IT
(FROM "FIFTY SHADES OF GREY")**

THE WEEKND

STYLE

TAYLOR SWIFT

TIME OF OUR LIVES

PITBULL

TAKE ME TO CHURCH

HOZIER

GDFR (FEAT. SAGE THE GEMINI & LOOKAS)

FLO RIDA

**I WANT YOU TO KNOW
(FEAT. SELENA GOMEZ)**

ZEDD

FLORIDA





TOP 10 ALBUMS

FIFTY SHADES OF GREY
(ORIGINAL MOTION PICTURE SOUNDTRACK)
VARIOUS ARTISTS

1989
TAYLOR SWIFT

X (DELUXE EDITION)
ED SHEERAN

SMOKE + MIRRORS
IMAGINE DRAGONS

SPRING BREAK...CHECKIN' OUT
LUKE BRYAN

SOUND & COLOR
ALABAMA SHAKES

MONTEVALLO
SAM HUNT

AMERICAN BEAUTY / AMERICAN PSYCHO
FALL OUT BOY

PIECE BY PIECE (DELUXE VERSION)
KELLY CLARKSON

IN THE LONELY HOUR (DELUXE VERSION)
SAM SMITH





TOP 10

MUSIC VIDEOS

UPTOWN FUNK (FEAT. BRUNO MARS)
MARK RONSON

SHAKE IT OFF
TAYLOR SWIFT

BLANK SPACE
TAYLOR SWIFT

STYLE
TAYLOR SWIFT

ALL ABOUT THAT BASS
MEGHAN TRAINOR

ONE LAST TIME
ARIANA GRANDE

FIRST KISS
KID ROCK

LIVING FOR LOVE
MADONNA

LIPS ARE MOVIN
MEGHAN TRAINOR

HAPPY (FROM DESPICABLE ME 2)
PHARRELL WILLIAMS





TOP 10 TV SHOWS

THE DISTANCE

THE WALKING DEAD, SEASON 5

IT'S ALL MY FAULT

HOW TO GET AWAY WITH MURDER, SEASON 1

THE WANDERER

VIKINGS, SEASON 3

THE NIGHT LILA DIED

HOW TO GET AWAY WITH MURDER, SEASON 1

HERO

BETTER CALL SAUL, SEASON 1

STARING AT THE END

GREY'S ANATOMY, SEASON 11

CONNECTION LOST

MODERN FAMILY, SEASON 6

INTENT

SUITS, SEASON 4

THEM

THE WALKING DEAD, SEASON 5

THE INTIMACY ACCELERATION

THE BIG BANG THEORY, SEASON 8





TOP

10 BOOKS

THE GIRL ON THE TRAIN

PAULA HAWKINS

FIFTY SHADES DARKER

E L JAMES

FIFTY SHADES OF GREY

E L JAMES

FIFTY SHADES FREED

E L JAMES

A THOUSAND ACRES

JANE SMILEY

AMERICAN SNIPER

CHRIS KYLE AND OTHERS

FIFTY SHADES TRILOGY BUNDLE

E L JAMES

THE NIGHTINGALE

KRISTIN HANNAH

STILL ALICE

LISA GENOVA

GONE GIRL

GILLIAN FLYNN





JAPAN'S MAGLEV TRAIN BREAKS OWN SPEED RECORD AT 603 KPH

A Japanese maglev that is the fastest passenger train in the world has broken its own speed record.

Operator JR Central said the train reached 603 kilometers per hour (375 miles per hour) in a test run on Tuesday, surpassing its previous record of 361 mph (581 kph) set in 2003. The train traveled for just over a mile (1.8 kilometers) at a speed exceeding 600 kph (373 mph).

Japan's high-speed rail services are among the most advanced in the world, with hundreds of trains running each day with minimal delays. However, unlike regular shinkansen or bullet trains that run on steel rails, magnetic levitation trains hover above rails, suspended by powerful magnets.

The Maglev Test Line, near Mount Fuji about 80 kilometers (50 miles) west of Tokyo, is developing technology for use on a future 410-kilometer (250-mile) link that will reduce travel time between Tokyo and Osaka to just over an hour.

Image: Yuriko Nakao

14.34 km



502 km/h







The current minimum by bullet train is nearly three hours.

The maglev trains, begun as a project of Japan Airlines and the national railways with government support, have undergone decades of testing. Construction of the Tokyo-Osaka link, which is expected to cost more than 9 trillion yen (\$76 billion), began in 2014.

The line, which will mostly run under mountains, is due to begin operations in the late 2020s. A similar system operates in Shanghai, linking its airport in the seaside suburbs of Pudong to the city's subway system.







PRIVACY ADVOCATES SEEK MORE OPENNESS ON NSA SURVEILLANCE

As Congress considers whether to extend the life of a program that sweeps up American phone records, privacy advocates and civil liberties groups say too much about government surveillance remains secret for the public to fully evaluate the program's reach or effectiveness.

The disclosure two years ago of the National Security Agency's surveillance efforts prodded the federal government to declassify reams of once-secret documents, including opinions from a secretive intelligence court laying out the program's origins and legal underpinnings. But critics say key language from the disclosed documents remains censored, the release of information has been selective, and the ongoing trickle of once-secret memos has raised concerns about how many other potentially illuminating documents might yet remain outside the public's reach.

"That means the public lacks information it needs to understand the significance of the powers that government already has and the significance of the powers that the government is asking for," said Jameel Jaffer, deputy legal director of the American Civil Liberties Union.



The NSA program that collects and stores phone records is conducted under Section 215 of the USA Patriot Act. The extent of its reach remained secret until Edward Snowden, a former NSA systems administrator, disclosed details of the surveillance in 2013. Amid a public backlash, President Barack Obama has proposed that the NSA stop collecting the records in bulk and instead request them from phone companies as needed for terrorism investigations. Congress is now deciding whether to renew or modify the phone records collection when the law authorizing it expires in June. Legislation is expected to be unveiled Wednesday in the House.

Intelligence officials say the program - it collects the “to” and “from” information on phone calls but not their content - is critical to detecting terrorist plots and have sought to justify it through the ongoing declassification of materials, including from the Foreign Intelligence Surveillance Court. Among documents released are court opinions outlining how the NSA was first authorized to start collecting bulk phone and Internet records in the hunt for al-Qaida terrorists, previously classified testimony from intelligence officials and NSA analyst training materials.

The disclosures far surpass available public information on other secret programs such as targeted drone strikes against terror suspects. But there are gaps in the information that privacy advocates say prevent the public from being able to fully judge the program’s effectiveness, including the extent to which Section 215 has been construed to allow for other types of bulk collection. Knowing how the government interprets its surveillance authorities, and how broadly they reach, is critical, advocates say.

“If the government is asking for the renewal of this authority, the public has a right to know at least in general terms how the authority is being used, and right now the public doesn’t have that,” Jaffer said.









Last month, a federal judge in New York held in a public records lawsuit that the government could lawfully withhold any secret ruling regarding the use of Section 215 to collect records other than bulk phone records. The judge, William Pauley, said the government had “offered a reasoned and persuasive argument for withholding” information that should not be second-guessed. In that same case, the Justice Department last year released a couple dozen surveillance court rulings but refused to turn over unspecified others, the exact number of which it said was classified.

The government continues to pull back the curtain with periodic new disclosures, such as the Justice Department’s release in January of a 5-year-old memo that said the Commerce Department was not obligated under Section 215 to turn over confidential census data to federal law enforcement. But such disclosures, though welcomed by civil liberties groups, also hint at how much might still be unknown.

The NSA program has also highlighted broader concerns about what privacy advocates say is the

federal government's overreliance on secretive court rulings and classified legal memos. Sen. Ron Wyden, D-Ore., a member of the Senate Intelligence Committee who opposes the bulk phone records collection, said while he believed the government had released enough information about the law - albeit under pressure - for an informed debate, he was nonetheless concerned about the role of secret legal interpretations.

Though intelligence agencies should be able to conduct secret operations, he said, "they shouldn't be following secret law."

Stephen Vladeck, an American University law professor, said it was possible that the debate about the phone records program distracts attention from other surveillance efforts that are perhaps more secretive, such as Executive Order 12333, which authorizes foreign intelligence collection overseas without a court order. He also said he thought the government had provided substantial information about what information it was collecting, but was less forthcoming about how that information was used.

"The conversation about collection and a conversation about use are very different conversations," he said. "And to have one without the other is to, I think, underappreciate the privacy consequences of each."

Liza Goitein, co-director of the liberty and national security program at the Brennan Center for Justice, said it was impossible to know how much information might be out there absent a complete index of how many memos, opinions or court orders even exist.

"We shouldn't be satisfied that we know everything" because, Goitein said, "we have no way to assess that we know everything."





A dense, colorful mosaic of Apple Magazine covers, tilted at an angle, creating a sense of depth and movement. The covers feature various headlines related to Apple products and events, such as "Steve Jobs", "WWDC 2012", "iPhone 5", "iPad mini", "Windows 8", and "Angry Birds Star Wars". The Apple logo is prominently displayed on many covers.

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